Scientific and Technical Information Center Scientific and Technical Information Center Scientific and Technical Information Center (S18) Date: 3-72003 Mr. Unit: 65 4 Phone Number 30 2 2775 Serial Number: 07 S20, 56 Mr. Unit: 65 4 Phone Number 30 2 2775 Serial Number: 07 S20, 56 Mr. Unit: 65 4 Phone Number 30 2 2775 Serial Number: 07 S20, 56 Mr. Unit: 65 4 Phone Number 30 2 2775 Serial Number: 07 S20, 56 Mr. Unit: 65 4 Phone Number 30 2 2775 Serial Number: 07 S20, 56 Mr. Unit: 65 4 Phone Number: 08 Results Format Preferred (circle): PAPKR DISNE MAIL (Mr. Unit): 65 4 Papk R DISNE MAIL (Mr. Unit): 67 4 Papk R DISNE MAIL (Mr. Unit): 67 4 Papk R DISNE MAIL (Mr. Unit): 67 4 Papk R DISNE MAIL (Mr. Unit): 68 4 Papk R DISNE MAIL (Mr. Unit): 68 4 Papk R DISNE MAIL (Mr. Unit): 68 4 Papk R DISNE MAIL (Mr. Unit): 69 4 Papk R DISNE MAIL (Mr. Unit): 69 4 Papk R DISNE MAIL (Mr. Unit): 69 4 Papk R DISNE MAIL (Mr. Unit): 70 4 Papk R DISNE MAIL (M	・別の取りのプログーを経ります。			770	COCO
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Requester's Full Name: Jeffr Elosse Examiner #: 62785 Date: 3-72005 Art Unit: 654 Phone Number 30 2-3975 Serial Number: 0\ 520.856 Mail Box and Bldg. Room Location: Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (M1-11D13 ACM) 9807 Results Format Preferred (circle): PAPER DISNE-MAIL. (Paper examples or relevant citations, and combine with the concept or attility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please glach a copy of the cover sheet, pertinent claims, and abstract. (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide full names): O Hoojeany) (Mile 6 Cruise) (Inventors (please provide		entific and Technica			
Mail Box and Bldg/Room Location: Results Format Preferred (circle): PAPER DISKE MAIL (M) 11013 (M) 1807 f more than one search is submitted, please prioritize searches in order of need. Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or attility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if conown. Please apach a copy of the cover sheet, pertinent claims, and abstract. Title of Invention: Clocarphible Indexible Indexible Indexible Indexible Inventors (please provide full names): O Plangewy). (Milo G. Cruise Earliest Priority Filing Date: 3-7-2000 Point of Contact: Mona Smith Technical Information Specialist *For Sequence Searches Only* Please include all pertinent information (parent, child, divisional contact) along with the appropriate serial number. Please serial SCO I O Mo. 1 (LGPA) in STM in the U.S. Please reach SCO I O Mo. 1 (LGPA) in STM in the U.S. Priester policities square of these require any both she have O ore fewer residees.	Requester's Full Name: Jeffe	E. Russel	Examiner # : 6278	35 Date: 3-7	2003
f more than one search is submitted, please prioritize searches in order of need. Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Internation of the search topic, synonyms, acronyms, and registry numbers, and combine with the concept or attility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if crown. Please attach a copy of the cover sheet, pertinent claims, and abstract. Title of Invention: Blocangethle Meteral Composition Alegable to Diverse Amagentic Advances (Inventors (please provide full names): O Hoojewyj (Mile G. Crujse) Earliest Priority Filing Date: 3.7-2000 Point of Contact: Mona Smith Technical Information Specialist *For Sequence Searches Only* Please include all pertinent information (parent, child, divisional compagns) patent numbers) along with the appropriate serial number. Please serial SCO ID NO: 1 (LGPA) in STN in the U.S. Please serial SCO ID NO: 1 (LGPA) in STN in the U.S. Patet epplication square It has published a issued. Please regions of published in the properties of the serial seri	Art Unit: 654 Phone N	umber 30 <u>8 - 3975</u>	Serial Number:	ON SZO, 856 (circle): PAPER DIS	SK)E-MAIL
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include the elected species or structures, keywhrds, synonyms, acronyms, and registry numbers, and combine with the concept or stillity of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please affach a copy of the cover sheet, pertinent claims, and abstract. Title of Invention: Compatible 1-terlal Composition Alathole To Duerse The special Tolicate Inventors (please provide full names): O Knojewji (Milo G. Crujse Earliest Priority Filing Date: 3-7-2000 Point of Contact: Mona Smith Technical Information Specialist Tol: 308-3278 Please search SEQ TO NO: 1 (LGPA) in STN in the U.S Please search SEQ TO NO: 1 (LGPA) in STN in the U.S Please search Sequence of the Security published a issued Ornessed Stuiss feet / PIR, Please require any both to have	*********	************	.**********	******	******
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FILE COVERS 1907 - 19 Mar 2003 VOL 138 ISS 12 FILE LAST UPDATED: 18 Mar 2003 (20030318/ED)

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L4 ANSWER 1 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:906436 HCAPLUS

DOCUMENT NUMBER:

138:13498

TITLE:

Method of identifying peptides capable of binding to MHC molecules for treating cancers and autoimmune

diseases

INVENTOR(S):

Barnea, Eilon; Beer, Ilan; Ziv, Tamar; Admon, Arie;

Dassau, Lior; Buchsbaum, Samuel

PATENT ASSIGNEE(S):

Technion Research and Development Foundation Ltd.,

Israel

SOURCE:

PCT Int. Appl., 238 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FIIGTTSI

FAMILY ACC. NUM. COUNT:

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PRIORITY APPLN. INFO.:

US 2001-290958P P 20010516 US 2001-865548 A 20010529

AB A method of identifying peptides originating from a particular cell type and being capable of binding to MHC mols. of a particular haplotype is disclosed. The method comprises obtaining a cell type expressing a sol. and secreted form of the MHC mols. of the particular haplotype; collecting the sol. and secreted form of the MHC mols. of the particular haplotype; and analyzing peptides bound to the sol. and secreted form of the MHC mols. of the particular haplotype, thereby identifying the peptides originating from the particular cell type and being capable of binding to MHC mols. of the particular haplotype. The anal. is performed by mass spectrometry, mass charge ratio and collision induced disintegration in combination with electronic protein database. The peptides are related to protein of interest includes a protein of pathogen, tumor-assocd. antigen or cytokine.

IT 477562-80-4

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(method of identifying peptides capable of binding to MHC mols. for treating cancers and autoimmune diseases)

L4 ANSWER 2 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:857450 HCAPLUS

DOCUMENT NUMBER:

137:380979

TITLE:

Human nucleic acids and corresponding proteins useful

in the detection and treatment of various cancers Jakobovits, Aya; Challita-Eid, Pia M.; Faris, Mary;

Ge, Wangmao; Hubert, Rene S.; Morrison, Karen; Morrison, Robert Kendall; Raitano, Arthur B.

PATENT ASSIGNEE(S):

SOURCE:

INVENTOR(S):

Agensys, Inc., USA

PCT Int. Appl., 1021 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

25

PATENT NO. KIND DATE									A	PPLI	CATI	ON NO	٥.	DATE				
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US 2001-282739P P 20010410
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WO 2002-US11654 A 20020410
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AB Eighteen genes and their resp. encoded proteins, and variants thereof, are described wherein the gene exhibits restricted expression in normal adult tissue and is overexpressed in various cancers. Suppression subtractive hybridization (SSH) is used to identify cDNAs corresponding to genes that are differentially expressed in cancer; PCR amplification, cloning, and sequencing of gene fragments from SSH yield the full-length cDNAs. Consequently, the gene products provide diagnostic, prognostic, prophylactic, and/or therapeutic targets for cancer. The genes or fragment thereof, their encoded proteins, or variants or fragments thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with the gene products can be used in active or passive immunization. [This abstr. record is one of 16 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

473789-00-3 473789-49-0 473790-15-7 IT

> RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

ANSWER 3 OF 55 HCAPLUS COPYRIGHT 2003 ACS L42002:857448 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:380977

TITLE:

Human nucleic acids and corresponding proteins useful

in the detection and treatment of various cancers INVENTOR(S): Jakobovits, Aya; Challita-Eid, Pia M.; Faris, Mary;

Ge, Wangmao; Hubert, Rene S.; Morrison, Karen; Morrison, Robert Kendall; Raitano, Arthur B.

PATENT ASSIGNEE(S):

SOURCE:

Agensys, Inc., USA PCT Int. Appl., 1021 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English 25

FAMILY ACC. NUM. COUNT:

PATENT NO.	KINI	D DATE		A	PPLI	CATI	и ис	٥.	DATE				
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AΒ Eighteen genes and their resp. encoded proteins, and variants thereof, are described wherein the gene exhibits restricted expression in normal adult tissue and is overexpressedn in various cancers. Suppression subtractive hybridization (SSH) is used to identify cDNAs corresponding to genes that are differentially expressed in cancer; PCR amplification, cloning, and sequencing of gene fragments from SSH yield the full-length cDNAs. Consequently, the gene products provide diagnostic, prognostic, prophylactic, and/or therapeutic targets for cancer. The genes or fragment thereof, their encoded proteins, or variants or fragments thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with the gene products can be used in active or passive immunization. [This abstr. record is one of 16 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

473789-00-3 473789-49-0 473790-15-7

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

ANSWER 4 OF 55 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:857443 HCAPLUS

DOCUMENT NUMBER: 137:321378

Human nucleic acids and corresponding proteins useful TITLE:

in the detection and treatment of various cancers Jakobovits, Aya; Challita-Eid, Pia M.; Faris, Mary;

Ge, Wangmao; Hubert, Rene S.; Morrison, Karen;

Morrison, Robert Kendall; Raitano, Arthur B.

PATENT ASSIGNEE(S):

Agensys, Inc., USA PCT Int. Appl., 1021 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

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ANSWER 5 OF 55 HCAPLUS COPYRIGHT 2003 ACS
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137:334071

TITLE:

Human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers

INVENTOR(S):

Jakobovits, Aya; Challita-Eid, Pia M.; Faris, Mary; Ge, Wangmao; Hubert, Rene S.; Morrison, Karen;

Morrison, Robert Kendall; Raitano, Arthur B.

PATENT ASSIGNEE(S):

SOURCE:

Agensys, Inc., USA PCT Int. Appl., 1021 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

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              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR', CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
               PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
               UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
               CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
                                                                                     TR.
               BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                               US 2001-282739P
                                                                   Ρ
                                                                      20010410
PRIORITY APPLN. INFO.:
                                                                   Ρ
                                               US 2001-283112P
                                                                      20010410
                                               US 2001-286630P
                                                                   Р
                                                                      20010425
                                               WO 2002-US11654
                                                                      20020410
                                                                  Α
     Eighteen genes and their resp. encoded proteins, and variants thereof, are
AΒ
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Eighteen genes and their resp. encoded proteins, and variants thereof, are described wherein the gene exhibits restricted expression in normal adult tissue and is overexpressed in various cancers. Suppression subtractive hybridization (SSH) is used to identify cDNAs corresponding to genes that are differentially expressed in cancer; PCR amplification, cloning, and sequencing of gene fragments from SSH yield the full-length cDNAs. Consequently, the gene products provide diagnostic, prognostic, prophylactic, and/or therapeutic targets for cancer. The genes or fragment thereof, their encoded proteins, or variants or fragments thereof, can be used to elicit a humoral or cellular immune response; antibodies or T cells reactive with the gene products can be used in active or passive immunization. [This abstr. record is one of 16 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

Russel 09/520,856

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(peptide epitope; human nucleic acids and corresponding proteins useful in the detection and treatment of various cancers)

L4 ANSWER 6 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:793322 HCAPLUS

DOCUMENT NUMBER: 137:305694

TITLE: Use of peptide tags derived by mass spectrometry to

develop queries for searching genomic databases

INVENTOR(S): Mann, Matthias; Mortensen, Peter

PATENT ASSIGNEE(S): MDS Proteomics, Inc., Den. SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					DATE			A	PPLI	CATI	ON N	ο.	DATE			
MO	2002	0806	49	A.	2 2	2002	1017		W	20	 02-U	S114	 17	2002	0409		
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	, WM	MX,	ΜZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	ΑM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,
		ТJ,	TM														
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	°CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG
PRIORITY	APP:	LN.	INFO	. :				1	US 2	001-	2825	51P	Ρ	2001	0409		
								1	US 2	001-	2853	62P	P	2001	0420		

AB The instant invention provides methods and systems for searching genomic databases using polypeptide sequence information, such as those obtained from peptide sequencing projects, esp. those using mass spectrometers. According to the instant invention, polypeptide sequences can be reverse translated into multiple sequence tags which are then used to search for identical or similar sequences in genomic databases, such as unannotated genomic databases of human or other organisms. Alternatively, the polypeptide sequences can be directly compared to sequences translated from at least 3, preferably all 6 reading frames of genomic sequences. The instant invention also provides systems for performing the methods of the instant invention, including computer systems, and systems including said computer systems and mass spectrometers linked to said computer systems. The instant invention further provides methods of conducting proteomic businesses using the methods of the instant invention.

IT 472959-53-8

RL: PRP (Properties)

(unclaimed sequence; use of peptide tags derived by mass spectrometry to develop queries for searching genomic databases)

L4 ANSWER 7 OF 55 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:343974 HCAPLUS

DOCUMENT NUMBER: 138:126898

TITLE: Cell migration through defined, synthetic

extracellular matrix analogues

AUTHOR(S):

Gobin, Andrea S.; West, Jennifer L.

CORPORATE SOURCE:

Dep. of Bioengineering, Rice Univ., Houston, TX,

77005-1892, USA

SOURCE:

FASEB Journal (2002), 16(7), 751-753,

10.1096/fJ.01-0759fje

CODEN: FAJOEC; ISSN: 0892-6638

PUBLISHER:

Federation of American Societies for Experimental

Biology

Journal

DOCUMENT TYPE: LANGUAGE: English

The authors have developed synthetic hydrogel extracellular matrix (ECM) analogs that can be used to study mechanisms involved in cell migration, such as receptor-ligand interactions and proteolysis. The biomimetic hydrogels consist of bioinert polyethylene glycol diacrylate derivs. with proteolytically degradable peptide sequences included in the backbone of the polymer and adhesive peptide sequences grafted to the network. Hydrogels have been developed that degrade as cells secrete proteolytic enzymes. Adhesive peptide sequences grafted to the hydrogel provide ligands that can interact with receptors on the cell surface to mediate adhesion and spreading. In this study, the authors have characterized the effects of adhesive ligand d. on fibroblast migration through collagenase-degradable and plasmin-degradable hydrogels and on smooth muscle cell migration through elastase-degradable hydrogels. In all three cases, it was found that cell migration has a biphasic dependence on adhesion ligand concn., with optimal migration at intermediate ligand levels. Furthermore, both adhesive and proteolytically degradable sequences were required for cell migration to occur. These synthetic ECM analogs may be useful for 3-D mechanistic studies of many aspects of cell migration.

432542-26-2DP, reaction products with acryloyl ΙT

PEG-N-hydroxysuccinimide

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cell migration through defined, synthetic extracellular matrix . analog-modified PEG derivs.)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS 25 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 55 HCAPLUS COPYRIGHT 2003 ACS 1.4

ACCESSION NUMBER:

2002:172080 HCAPLUS

DOCUMENT NUMBER:

136:211958

TITLE:

Nucleic acid and corresponding protein named 85P1B3 useful in the treatment and detection of cancer

INVENTOR(S):

Raitano, Arthur B.; Faris, Mary; Hubert, Rene S.;

Afar, Daniel; Ge, Wangmao; Challita-Eid, Pia;

Jakobovits, Aya

PATENT ASSIGNEE(S):

Agensys, Inc., USA

SOURCE:

PCT Int. Appl., 201 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018578	A2	20020307	WO 2001-US26838	20010828
WO 2002018578	А3	20021003		

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AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                      CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                      GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
                      LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
               PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                                     AU 2001-88466 20010828
US 2000-228432P P 20000828
WO 2001-US26838 W 20010828
         AU 2001088466
                                     Α5
                                              20020313
PRIORITY APPLN. INFO.:
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A novel gene (designated 85P1B3) and is encoded protein are described. AB isolates genes that are involved in the progression of androgen-dependent prostate cancer to androgen-independent cancer, the suppression subtractive hybridization (SSH) procedure was used with cDNA derived from LAPC-4 androgen-dependent xenograft in male SCID mice (3 days post-castration vs. no castration). The 85P1B3 SSH cDNA sequence is a fragment of the Opa-interacting protein 5 gene (OIP-5). A 85P1B3 cDNA clone of 1262 bp was isolated by screening a human testis library, revealing an ORF of 229 amino acids. The 85P1B3 nucleotide and protein sequence correspond to the OIP-5 gene, the protein is predicted to be localized to the cytoplasmic, and the gene was localized to chromosome 15q13.2-q14 (a region implicated in cancers). The restricted expression of 85P1B3 in normal tissues, and the expression detected in bladder. cancer, kidney cancer, colon cancer, lung, cancer, prostate cancer, ovarian cancer, and breast cancer indicate that 85P1B3 is a therapeutic and/or prophylactic target and a prognostic and/or diagnostic marker for human cancer. The 85P1B3 gene or fragment thereof, or its encoded protein or a fragment thereof, can be used to elicit an immune response.

IT 400853-42-1 400853-70-5 400853-95-4 400855-45-0 400855-54-1 400856-16-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (epitope; nucleic acid and corresponding protein named 85P1B3 useful in the treatment and detection of cancer)

ANSWER 9 OF 55 HCAPLUS COPYRIGHT 2003 ACS L4

2002:52003 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

136:117371

TITLE: Method of inducing an immunological CTL response by

lymphatic system delivery of peptide vaccine

Kundig, Thomas M.; Simard, John J. L. INVENTOR(S):

PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 380,534.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT	NO.		KI	ND 	DATE			A	PPLI	CATI	ON N	0.	DATE			۸.
US 2002007173 WO 9902183 WO 9902183			A A A	2	2002 1999 1999	0121		-			7623 S142	_	2001 1998		,	
₩:	DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	CN, IS, MK,	JP,	ΚE,	KG,

09/520,856 Russel Page 12

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NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
                UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
                FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
                CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      AU 2001097432
                            A5
                                    20020808
                                                        AU 2001-97432
                                                                                20011221
                              A2
                                     20020815
                                                        WO 2002-US2033
                                                                                20020122
      WO 2002062368
               AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
           W:
                CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
           PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                                     CA 1997-2209815 A 19970710
                                                                           B2 19971210
                                                     US 1997-988320
                                                     WO 1998-US14289 W 19980710
                                                     US 1999-380534
                                                                           A2 19990901
                                                     US 2001-776232
                                                                           A 20010202
      Disclosed herein are methods for inducing an immunol. CTL response to an
      antigen by sustained, regular delivery of the antigen to a mammal so that
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AB the antigen reaches the lymphatic system. Antigen is delivered at a level sufficient to induce an immunol. CTL response in a mammal and the level of the antigen in the mammal's lymphatic system is maintained over time sufficient to maintain the immunol. CTL response. Also disclosed is an article of manuf. for delivering an antigen that induces a CTL response in The antigen can be used in vaccines for cancer or infection. an animal.

IΤ 390749-36-7

RL: PRP (Properties)

(unclaimed sequence; method of inducing an immunol. CTL response by lymphatic system delivery of peptide vaccine)

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ANSWER 10 OF 55 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:
                        2001:719664 HCAPLUS
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DOCUMENT NUMBER:

136:99152

TITLE:

New minor cyclic peptides from Brachystemma calycinum

Cheng, Yongxian; Zhou, Jun; Tan, Ninghua AUTHOR (S):

Laboratory of Phytochemistry, Kunming Institute of CORPORATE SOURCE: Botany, The Chinese Academy of Sciences, Kunming, 650204, Peop. Rep. China

Zhiwu Xuebao (2001), 43(7), 760-765 SOURCE:

CODEN: CHWHAY; ISSN: 0577-7496

PUBLISHER: Kexue Chubanshe

DOCUMENT TYPE: Journal English LANGUAGE:

From the ethanol ext. of the roots of Brachystemma calycinum D. Don, a Chinese folk herb, four new minor cyclic peptides namely brachystemins A, B, C and D were isolated. Their structures were established as cyclo (Pro1-Phe-Leu-Ala1-Thr-Pro2-Ala2-Gly), cyclo(Pro1-Ala-Phe-Trp-Asp-Pro2-Leu-Gly), cyclo (Prol-Ile-Gly-Pro2-Val-Ala1-Ala2-Tyr) and cyclo (Pro-OMet-Trp-Ile-Gly-Ala-Leu-Asp), resp. by means of extensive spectral methods.

389064-17-9P, Brachystemin B TT

RL: NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(cyclic peptides from Brachystemma calycinum)

REFERENCE COUNT:

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 55 HCAPLUS COPYRIGHT 2003 ACS L4

ACCESSION NUMBER:

2001:628094 HCAPLUS 137:10877

DOCUMENT NUMBER: TITLE:

Smooth muscle cell growth in photopolymerized hydrogels with cell adhesive and proteolytically degradable domains: synthetic ECM analogs for tissue

engineering

AUTHOR(S):

Mann, B. K.; Gobin, A. S.; Tsai, A. T.; Schmedlen, R.

H.; West, J. L.

CORPORATE SOURCE:

Department of Bioengineering, Rice University,

Houston, TX, 77005-1892, USA

SOURCE:

Biomaterials (2001), 22(22), 3045-3051

CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER:

Elsevier Science Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Photopolymerizable polyethylene glycol (PEG) derivs. have been investigated as hydrogel tissue engineering scaffolds. These materials have been modified with bioactive peptides in order to create materials that mimic some of the properties of the natural extracellular matrix The PEG derivs. with proteolytically degradable peptides in their backbone have been used to form hydrogels that are degraded by enzymes involved in cell migration, such as collagenase and elastase. Cell adhesive peptides, such as the peptide RGD, have been grafted into photopolymd. hydrogels to achieve biospecific cell adhesion. Cells seeded homogeneously in the hydrogels during photopolymn. remain viable, proliferate, and produce ECM proteins. Cells can also migrate through hydrogels that contain both proteolytically degradable and cell adhesive peptides. The biol. activities of these materials can be tailored to meet the requirements of a given tissue engineering application by creating a mixt. of various bioactive PEG derivs. prior to photopolymn.

IT 432542-27-3P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(smooth muscle cell growth in photopolymd. hydrogels with cell adhesive and proteolytically degradable domains)

REFERENCE COUNT:

32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:565069 HCAPLUS

DOCUMENT NUMBER:

135:151623

TITLE:

HIV peptides and nucleic acids encoding them for

diagnosis and control of HIV infection

INVENTOR(S):

Fomsgaard, Anders; Brunak, Soren; Buus, Soren; Corbet,

Sylvie; Lauemoller, Sanne Lise; Hansen, Jan

PATENT ASSIGNEE(S):

Statens Serum Institut, Den.

SOURCE:

PCT Int. Appl., 383 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2001055177
                           A2
                                     20010802
                                                         WO 2001-DK59
                                                                               20010129
      WO 2001055177
                             AЗ
                                     20020307
                AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
                 CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI,
                 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
                 KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
                 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
           RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                    20021023
      EP 1250351
                             A2
                                                        EP 2001-946867
                                                                               20010129
                AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:
                                                     EP 2000-610017
                                                                            A 20000128
                                                     US 2000-179333P P
                                                                                20000131
                                                                           W
                                                     WO 2001-DK59
                                                                                20010129
AΒ
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The present invention relates to the identification of CTL epitopes by the combination of biochem. assays, statistical matrix calcns., and artificial neural networks. A set of peptide libraries are used to generate complete unbiased matrixes representing peptide-MHC interactions used to generate a primary prediction of MHC binding for all possible non-redundant peptides. The best binders are subject to a quant. biochem. binding assay and subsequently a computerized artificial neural network prediction program built from these in vitro exptl. MHC-I binding data. The method further comprises improving the identified epitope by replacing amino acids, and testing the identified CTL epitopes in in vitro and in vivo models. Thus, one aspect of the invention relates to the identification of a CTL component of a vaccine and the development of said CTL component. Another aspect of the invention relates to the identified epitopes of said CTL component.

IT 334730-91-5 352627-08-8 352627-73-7

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(identification cytotoxic T lymphocyte epitopes of HIV proteins and nucleic acids encoding them for diagnosis and control of HIV infection)

IT 352628-04-7 352628-05-8 352628-06-9 352635-41-7

RL: PRP (Properties)

(unclaimed sequence; hIV peptides and nucleic acids encoding them for diagnosis and control of HIV infection)

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L4 ANSWER 13 OF 55 HCAPLUS COPYRIGHT 2003 ACS
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ACCESSION NUMBER:

2001:351063 HCAPLUS

Correction of: 2001:265260

DOCUMENT NUMBER:

134:365695

Correction of: 134:309684

TITLE:

Inducing cellular immune responses to human

immunodeficiency virus-1 using peptide and nucleic

acid compositions

INVENTOR(S):

Sette, Alessandro; Sidney, John; Southwood, Scott; Livingston, Brian D.; Chesnut, Robert; Baker, Denise Marie; Celis, Esteban; Kubo, Ralph T.; Grey, Howard M.

PATENT ASSIGNEE(S):

Epimmune Inc., USA

SOURCE:

PCT Int. Appl., 448 pp.

CODEN: PIXXD2

09/520,856 Russel

Page 15

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DOCUMENT TYPE:
LANGUAGE:
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Patent English

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ____ _____ ______ WO 2000-US27766 20001005 WO 2001024810 A1 20010412 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB,

GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-412863 19991005

This invention uses knowledge of the mechanisms by which antigens are recognized by T cells to identify and prep. human immunodeficiency virus (HIV) epitopes, and to develop epitope-based vaccines directed towards HIV. More specifically, this application communicates the discovery of pharmaceutical compns. and methods of use in the prevention and treatment of HIV infection.

124859-55-8 334730-89-1 334731-84-9 334731-85-0 334731-87-2 334732-89-7 340238-34-8

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(epitopes of HIV-1, cytotoxic T lymphocyte and helper T lymphocyte as vaccine for inducing cellular immune responses to human immunodeficiency virus-1)

ANSWER 14 OF 55 HCAPLUS COPYRIGHT 2003 ACS L4

ACCESSION NUMBER:

2001:265260 HCAPLUS

DOCUMENT NUMBER:

134:309684

TITLE:

Inducing cellular immune responses to human

immunodeficiency virus-1 using peptide and nucleic

acid compositions

INVENTOR(S):

Sette, Alessandro; Sidney, John; Southwood, Scott; Livingston, Brian D.; Chesnut, Robert; Baker, Denise Marie; Celis, Esteban; Kubo, Ralph T.; Grey, Howard M.

PATENT ASSIGNEE(S):

Epimmune Inc., USA

SOURCE:

PCT Int. Appl., 448 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

PAT	PATENT NO. KIND					DATE			A	PPLI	CATI	ON NO	ο.	DATE			
									_								
WO	2001	0248	10 A	1		2001	0412		W	20	00-U	S277	66	2000	1005		
W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	CR,
	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,
	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,
						ТJ,											
RW:	AT,	BE,	BF,	ВJ,	CF,	CG,	CH,	CI,	CM,	CY,	DE,	DK,	ES,	FI,	FR,	GΑ,	GB,
	GR,	IE,	IT,	LU,	MC,	ML,	MR,	NE,	NL,	PT,	SE,	SN,	TD,	ΤG			

PRIORITY APPLN. INFO.:

US 1999-412863 19991005

AB This invention uses knowledge of the mechanisms by which antigens are recognized by T cells to identify and prep. human immunodeficiency virus (HIV) epitopes, and to develop epitope-based vaccines directed towards HIV. More specifically, this application communicates the discovery of pharmaceutical compns. and methods of use in the prevention and treatment of HIV infection.

IT 124859-55-8 334730-89-1 334730-90-4 334730-91-5 334731-84-9 334731-85-0 334731-87-2 334732-89-7 334732-91-1 334754-07-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (HIV-1 supermotif peptide; epitopes of HIV-1, cytotoxic T lymphocyte and helper T lymphocyte as vaccine for inducing cellular immune responses to human immunodeficiency virus-1)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:50831 HCAPLUS

DOCUMENT NUMBER: 134:114851

TITLE: Modified human granulocyte-colony stimulating factor

and its production by recombinant expression in

transformed Escherichia coli

INVENTOR(S): Kwon, Se Chang; Jung, Sung Youb; Bae, Sung Min; Lee,

Gwan Sun

PATENT ASSIGNEE(S): Hanmi Pharm. Co., Ltd., S. Korea

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE	
WO 2001004329	A1	20010118	WO 2000-KR733 20000707	
· W: AU, BR,			RU, SG, US	
RW: AT, BE,	CH, CY,	DE, DK,	ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,	
PT, SE				
KR 2001009171	A	20010205	KR 1999-27418 19990708	
BR 2000012265	A	20020312	BR 2000-12265 20000707	
EP 1194575	A1 :	20020410	EP 2000-942494 20000707	
R: AT, BE,	CH, DE,	DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,	
IE, FI				
JP 2003504069	T2	20030204	JP 2001-509533 20000707	
PRIORITY APPLN. INFO	.:		KR 1999-27418 A 19990708	
			WO 2000-KR733 W 20000707	

AB Modified human granulocyte-colony stimulating factors (hG-CSF) are produced by culturing Escherichia coli transformed with expression vectors comprising a gene encoding a modified hG-CSF to produce and secrete the modified hG-CSF to periplasm. The modified hG-CSFs being obtained replacing at least one of the 1st, 2nd, 3rd and 17th amino acids of wild-type hG-CSF with another amino acid. Expression of hG-CSF variants is enhanced by construction of chimeric genes comprising sequences encoding the Escherichia coli wild-type or modified thermoresistant enterotoxin II signal peptide, the E. coli .beta.-lactamase signal peptide, or the E. coli gene III signal peptide, as well as use of the Shine-Dalgano sequence from E. coli enterotoxin II gene.

TT 321308-73-0

RL: PRP (Properties)

(Unclaimed; modified human granulocyte-colony stimulating factor and its prodn. by recombinant expression in transformed Escherichia coli) REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 55 HCAPLUS COPYRIGHT 2003 ACS

2000:772489 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 133:355232

TITLE: Enzymatically activated polymeric drug conjugates INVENTOR(S):

Pachence, James M.; Belinka, Benjamin A.; Ramani,

Thulasi

PATENT ASSIGNEE(S): Veritas Medical Technologies, Inc., USA

PCT Int. Appl., 100 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO. WO 2000064486				ND	DATE			I	APPLI	CATI		Э.	DATE			
	2000					2000:			Ţ	NO 20			70	2000	0428		
	₩:	AE, CZ, IL, MD,	AG, DE, IN, MG,	AL, DK, IS, MK,	AM, DM, JP, MN,	AT, DZ, KE, MW,	AU, EE, KG, MX,	ES, KR, NO,	FI, KZ, NZ,	BB, GB, LC, PL,	GD, LK, PT,	GE, LR, RO,	GH, LS, RU,	GM, LT, SD,	HR, LU, SE,	HU, LV, SG,	ID, MA, SI,
	RW:	BY, GH, DK,	KG, GM, ES,	KZ, KE, FI,	MD, LS, FR,	RU, MW, GB,	TJ, SD, GR,	TM SL, IE,	SZ,	TZ, LU, NE,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
		AT, IE,	BE, SI,	CH, LT,	LV,	DK, FI,	ES, RO		GB,	EP 200 , GR, JP 200	IT,	LI,	LU,		SE,	MC,	PT,
PRIORITY				_	۷.	2002.	1210		us :	1999-1 1999-1 2000-1	13140 1630	04P 90P	P P		0428 1102		

AΒ The present invention relates to a polymeric drug conjugate with one or more biol. active agents conjugated via an enzymically cleavable linker to either a regular repeating linear unit comprising a water sol. polymer segment and a multifunctional chem. moiety, or a branched polymer comprising two or more water sol. polymer segments each bound to a common multifunctional chem. moiety, as well as to methods of making such . conjugates. The present invention is also directed to pharmaceutical compns. comprising such conjugates and to the use of such conjugates to treat pathol. conditions. A conjugate consisting of Fmoc-doxorubicin-14-0hemiglutarate deriv. as an active agent, tetrapeptide Val-Gly-Pro-Ala as an enzymically cleaved linker, a multifunctional chem. moiety prepd. from N-fluorenylmethoxycarbonyl-O-tert-butylserine, N-(benzyloxycarbonyl)ethane-1,2-diamine, and tetrahydropyranyl ether, and polyethylene glycol 2000 was prepd.

304851-60-3D, conjugates with polymers and multifunctional chem. ΤТ moieties and biol. active agents

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (polymeric drug conjugate contg. water-sol. polymers and

multifunctional chem. moieties and enzymically cleavable linkers and biol. active agents)

IT 86563-77-1D, reaction products with PEG-serine copolymer

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of polymeric drug conjugate contg. water-sol. polymers and multifunctional chem. moieties and enzymically cleavable linkers and biol. active agents)

IT 86563-78-2

RL: PRP (Properties)

(unclaimed sequence; enzymically activated polymeric drug conjugates)

L4 ANSWER 17 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:144132 HCAPLUS

DOCUMENT NUMBER:

132:152142

TITLE:

Synthesis of peptides with N-substituted glycines as luteinizing hormone-releasing hormone inhibitory

analogs for treatment of hormone-dependent tumors.

INVENTOR(S):

Dechantsreiter, Michael; Kessler, Horst; Bernd, Michael; Kutscher, Bernhard; Beckers, Thomas

PATENT ASSIGNEE(S):

Asta Medica A.-G., Germany

SOURCE:

Ger. Offen., 32 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 19941248 A1 20000302 DE 1999-19941248 19990831
PRIORITY APPLN. INFO.: DE 1998-19839817 19980901

OTHER SOURCE(S): MARPAT 132:152142

AB Title decapeptide compds. in which one or two glycine amine groups have been substituted with side-chain equiv. of natural or non-natural amino acids were prepd. as analogs of LH-RH, for use in treating hormone-dependent tumors or for LH-RH suppression therapies (no data). Thus, amino acid substitutes were prepd. by, for example, alkylation of an amine such as 4-Cl-C6H4-NH2 with BrCH2COOEt, or amination of CHOCO2H with RNH(CH2)2OC(CH3)3 (R = protecting group). The amino acid substitutes could then be used in solid-phase synthesis (BOC or Fmoc chem.) to prep. fragments for soln. coupling to give the final decapeptides.

IT 258332-94-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of N-substituted glycines for use in prepn. of peptides as LH-releasing hormone inhibitory analogs for treatment of hormone-dependent tumors)

L4 ANSWER 18 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1999:217439 HCAPLUS

DOCUMENT NUMBER:

131:84673

TITLE:

Pseudo First-Order Cleavage of an Immobilized Substrate by an Enzyme Undergoing Two-Dimensional

Surface Diffusion

AUTHOR(S):

Trigiante, Giuseppe; Gast, Alice P.; Robertson,

Channing R.

CORPORATE SOURCE:

Department of Chemistry, Stanford University,

Stanford, CA, 94305-5025, USA

SOURCE:

Journal of Colloid and Interface Science (1999),

213(1), 81-86

CODEN: JCISA5; ISSN: 0021-9797

PUBLISHER:
DOCUMENT TYPE:

Academic Press Journal

DOCUMENT TYPE: LANGUAGE:

English

In this paper we study the reaction kinetics of an enzyme adsorbed on a peptide substrate surface. Although the adsorption is effectively irreversible, the enzyme is able to diffuse on the surface. Our reaction system consisted of the enzyme collagenase and the oligopeptide FALGPA, a substrate for the enzyme. A quartz surface was coated with covalently bound substrate mols. The extent of reaction was monitored continuously in a flow cell via UV absorption. The data are compatible with a kinetic model based on a pseudo first-order diffusion/orientation rate-limiting step followed by a relatively fast chem. cleavage step. This model was validated by examg. the pH dependence of the rate const. (c) 1999 Academic Press.

IT 78832-65-2D, immobilized

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(pseudo first-order cleavage of an immobilized substrate by an enzyme undergoing two-dimensional surface diffusion)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:640834 HCAPLUS

DOCUMENT NUMBER:

127:326501

TITLE:

Enantiomeric screening process and compositions

therefor

INVENTOR(S):

Forster, Anthony C.

PATENT ASSIGNEE(S):

President and Fellows of Harvard College, USA;

Forster, Anthony C. PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

· PA'	rent l	NO.		KI	ND	DATE			A.	PPLI	CATI	ои ис	э.	DATE			
	9735 9735			 A: A:		1997) 1997)			W	0 19	97 - U:	5417	6	1997	0321		
	W:	AL, DK, LK,	EE, LR,	AT, ES, LS,	AU, FI, LT,	AZ, GB, LU,	BA, GE, LV,	HU, MD,	IL, MG,	IS, MK,	JP, MN,	KE, MW,	KG, MX,	CN, KP, NO, UG,	KR, NZ,	KZ, PL,	LC, PT,
	R₩:	GH, GR,	KE, IE,	LS, IT,	MW, LU,		SZ, NL,	UG,	AT,	BE,				ES, CI,			
AU PRIORIT	9725 Y APP	313	•	Α	•	1997		34	A) US 1: WO 1:		6223	38		1997 1996 1997	0321		۸.

AB The present invention makes available a powerful directed approach for identifying enantioselective compds, which bind to biol. targets. The goal was to provide a method for ligand and drug discovery that may enable one to rapidly discover drug candidates for protein targets. As a general overview, the present invention relates, in one aspect, to a method for

identifying compds. which interact with a target mol. by (1) contacting a screening mol. with a variegated compd. library, wherein the screening mol. comprises solid target mol. or the enantiomer thereof if the target mol. is chiral; (2) selecting from the library compds. which have a desired interaction with the target mol.; and (3) testing the ability of the enantiomer of a compd. selected in step (2) to interact with the target mol. The method was tested with 3 different drug targets and 2 different control targets, and the results presented support the feasibility of the method.

IT 197438-20-3P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(enantiomeric screening process and compns. in relation to drug discovery)

L4 ANSWER 20 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1997:287127 HCAPLUS

DOCUMENT NUMBER:

126:321066

TITLE:

Protease-mediated drug delivery system

INVENTOR(S):

Kennedy, James C.; Ringuet, Michel; Pottier, Roy H.

PATENT ASSIGNEE(S):

Queen's University At Kingston, Can.

SOURCE:

U.S., 10 pp., Cont.-in-part of U.S. Ser. No. 833,183,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO	. DATE
US 5618790	Α	19970408	US 1994-213897	19940316
PRIORITY APPLN. INFO).:		US 1990-593867	19901005
			HC 1002-033103	10020210

US 1992-833183 AΒ Lipophilic and amphiphilic therapeutic or diagnostic agents that have water-solubilizing groups attached thereto by bonds that can be cleaved readily by one or more of the various proteases that are active in the extracellular fluid or on the surfaces of cells in many types of malignant tissue may accumulate selectively in such malignant tissues. Protease-mediated removal of the water-solubilizing groups converts such drugs into lipophilic or amphiphilic forms which are more sol. in plasma membrane lipids and which therefore enter cells more readily. extracellular fluid in most non-malignant tissues under normal circumstances has little such protease activity, removal of the water solubilizing groups takes place primarily within malignant tissues, with consequent preferential accumulation of the lipophilic or amphiphilic forms of the drug within malignant tissues. Certain lipophilic and amphiphilic porphyrins and chlorins may be modified by the addn. of water solubilizing groups, such as alcs., which are attached by short polypeptide chains, that are stable while in the circulation but are cleaved by proteases in malignant tissue to provide novel compds. useful for the photodynamic therapy of cancer.

IT 86563-78-2 189336-21-8 189336-22-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(protease-mediated drug delivery system)

ANSWER 21 OF 55 HCAPLUS COPYRIGHT 2003 ACS

1995:967272 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 124:7073

Hepatitis C virus (HCV)-derived peptides for inducing cytotoxic T lymphocyte (CTL) against HCV $\,$ TITLE:

Chisari, Francis V.; Cerny, Andreas INVENTOR(S):

PATENT ASSIGNEE(S): Scripps Research Institute, USA

PCT Int. Appl., 86 pp. SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
WO 9525122	A1	19950921	WO 1995-US3224 19950316
W: CA, JP, RW: AT, BE,		, DK, ES,	FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 5709995	Å	19980120	
CA 2184890	AA	19950921	CA 1995-2184890 19950316
EP 759937	A1	19970305	EP 1995-914048 19950316
EP 759937	В1	20000830	
R: AT, BE,	CH, DE	, DK, ES,	FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SI
JP 09510455	Т2	19971021	JP 1995-524151 19950316
AT 195953	E	20000915	AT 1995-914048 19950316
US 2002115061	A1	20020822	US 1997-854825 19970512
PRIORITY APPLN. INFO	.:		US 1994-214650 A 19940317
			WO 1995-US3224 W 19950316

Peptides derived from various regions of the HCV genome are provided to boost the cellular immune system to fight or prevent HCV hepatitis. A total of 53 HCV-1-derived peptides were tested for capability to induce HCV-specific responses. The peptides of interest are ADLMGYIPLV (Core131-140), LLALLSCLTV (Core178-187), QLRRHIDLLV (E257-266), LLCPAGHAV (NS31169-1177), KLVALGINAV (NS31406-1415), SLMAFTAAV (NS41789-1797), LLFNILGGWV (NS41807-1816), and ILDSFDPLV (NS52252-2260). Such mols. are used for the treatment and prevention of acute or chronic HCV hepatitis; suitable pharmaceutical compns. and methods using such compns. are disclosed.

171105-38-7 171105-39-8 TT

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peptide derived from hepatitis C virus; assessment of hepatitis C virus-derived peptides for capability of inducing cytotoxic T lymphocyte against HCV)

ANSWER 22 OF 55 HCAPLUS COPYRIGHT 2003 ACS

1995:961716 HCAPLUS ACCESSION NUMBER:

124:48923 DOCUMENT NUMBER:

Antibodies specific for proteolyzed forms of protein TITLE:

kinase C .alpha. Kikuchi, Hidehiko; Imajoh-Ohmi, Shinobu AUTHOR(S):

Institute of Medical Science, University of Tokyo, CORPORATE SOURCE: 4-6-1, Shirokanedai Minato-ku, Tokyo, 108, Japan Biochimica et Biophysica Acta (1995), 1269(3), 253-9

SOURCE: CODEN: BBACAQ; ISSN: 0006-3002

Elsevier PUBLISHER: Journal DOCUMENT TYPE:

Russel 09/520,856 Page 22

LANGUAGE: English

The activation of protein kinase C (PKC) is irreversibly regulated by limited proteolysis catalyzed by a calcium-activated neutral cysteine protease, calpain. Calpain cleaves PKC.alpha. at specific sites in the hinge region between the catalytic and the regulatory domains of this Here we show a novel method for prodn. of antibodies that bind specifically to the catalytic fragment of PKC.alpha. but not to the unproteolyzed protein. To detect proteolyzed PKC.alpha., cleavage site-directed antibodies, which recognize amino-terminal regions in the nascent catalytic fragments and do not cross-react with the unproteolyzed enzymes, were raised using synthetic peptides corresponding to the amino-terminal sequences. The synthetic peptides used in this study were the sequences of human PKC.alpha. at the cleavage sites by m- and .mu.-types of calpains (LGPAGNKV and VISPSEDRKQPSNNLDRVKLT, resp.) and they are designated as CF.alpha.2, CF.alpha.4, in this order. Each synthetic peptide was injected into rabbit after conjugation with a carrier protein. The antibodies thus obtained (anti-CF.alpha.2 or -CF.alpha.4) specifically reacted with either the 46- or 45-kDa catalytic fragment of PKC.alpha., resp., whereas they did not cross-react with other fragments. Furthermore, the antibodies did not bind to the unproteolyzed enzyme nor fragments of PKC.alpha. obtained by treatment with other proteinases unless the fragment carried the same amino-terminal sequence. When human platelets were treated with calcium ionophore, the catalytic fragments of PKC.alpha. (45- and 46-kDa) were detected in the cytosol by immunoblotting with the antibodies. However, these antibodies did not bind unproteolyzed 80-kDa PKC.alpha., although this form was dominant in the cytosol of the calcium ionophore-treated human platelets. the 45-kDa catalytic fragment of PKC.alpha. was detected in apoptotic human fibroblast TIG-3 cells cultured in serum-free medium. Our method is applicable for anal. of proteolysis in various cellular states.

IT 114454-63-6

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(immunogen; antibodies specific for proteolyzed forms of protein kinase C .alpha.)

L4 ANSWER 23 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:460828 HCAPLUS

DOCUMENT NUMBER: 122:310033

TITLE: Modified FALGPA assay for cell-associated

collagenolytic activity

AUTHOR(S): Jackson, Rosalind J.; Dao, My Lien; Lim, Daniel V. CORPORATE SOURCE: Department Biology, University South Florida, Tampa,

FL, 33620-5150, USA

SOURCE: Journal of Microbiological Methods (1995), 21(2),

209-15

CODEN: JMIMDQ; ISSN: 0167-7012

DOCUMENT TYPE: Journal LANGUAGE: English

AB A continuous spectrophotometric assay monitoring the hydrolysis of the synthetic peptide 2-furanacryloyl-L-leucylglycyl-L-prolyl-L-alanine (FALGPA) is used to measure collagenase activity of both bacterial and vertebral collagenases. In the present study, a protocol was developed to adapt this assay to the measurement of cell-assocd. FALGPA hydrolytic activity in bacteria. The bacteria tested included Bacillus cereus, Streptococcus agalactiae, Streptococcus mutans, Enterococcus faecalis, and Escherichia coli, and various levels of activity were identified. The method presented here allows the detection of FALGPA hydrolysis using a small quantity of cells without the need for prior purifn. of the

collagenolytic enzyme or collection and concn. of a large vol. of culture supernatant fluid.

IT 78832-65-2

RL: ANT (Analyte); ANST (Analytical study)
(modified FALGPA assay for cell-assocd. collagenolytic activity)

L4 ANSWER 24 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1995:13705 HCAPLUS

DOCUMENT NUMBER:

122:10665

TITLE:

Site-Specific Religation of G-CSF Fragments through a

Thioether Bond

AUTHOR(S):

Gaertner, Hubert F.; Offord, Robin E.; Cotton, Ron;

Timms, David; Camble, Roger; Rose, Keith

CORPORATE SOURCE:

Departement de Biochimie Medicale, Centre Medical

Universitaire, Geneva, 1211, Switz.

SOURCE:

Bioconjugate Chemistry (1994), 5(4), 333-8

CODEN: BCCHES; ISSN: 1043-1802

DOCUMENT TYPE:

Journal English

LANGUAGE:

Anew approach is described for linking, through a thioether bond, the C-terminus of one unprotected peptide with the N-terminus of a another. Homocysteine thiolactone is attached to the C-terminus of one peptide by reverse proteolysis and provides through hydroxylamine treatment a free sulfhydryl group. The .alpha.-amino group of a second peptide is selectively iodoacetylated by reaction with iodoacetic anhydride at pH 6.0 or the N-hydroxysuccinimide ester deriv. at pH 7.0. Coupling of the two modified fragments occurs in a spontaneous alkylation reaction under mild conditions. After preliminary expts. with small peptides, this approach was extended to large protein fragments derived from recombinant analogs of G-CSF by enzymic digestion. This approach provides a means of making head-to-tail protein chimeras or introducing noncoded structural elements into a protein.

IT 159348-01-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, via S-alkylation of homocysteine thiolactone deriv. with iodoacetyl peptide fragment)

L4 ANSWER 25 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1994:503061 HCAPLUS

DOCUMENT NUMBER:

121:103061

TITLE: AUTHOR(S):

Enzymes on Immobilized Substrate Surfaces: Diffusion Gaspers, Pamela B.; Robertson, Channing R.; Gast,

Alice P.

CORPORATE SOURCE:

Department of Chemical Engineering, Stanford University, Stanford, CA, 94305-5025, USA

SOURCE:

Langmuir (1994), 10(8), 2699-704 CODEN: LANGD5; ISSN: 0743-7463

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB The authors' goal is to measure the influence of reaction on the lateral mobility of an enzyme on the surface of an immobilized substrate. The authors examine the mobility of collagenase on surfaces comprising immobilized peptides susceptible to cleavage by collagenase. To probe the effect of reaction on enzyme mobility, the authors study adsorption and subsequent movement of both active and inactive collagenase on substrate surfaces. Using the technique of total internal reflection fluorescence, the authors find that collagenase adsorption onto the surface is transport limited under the flow conditions used herein. After assessing the dependence of surface coverage on bulk concn., the authors examine enzyme

mobility at low and high surface coverages via a combined method of total internal reflection and fluorescence recovery after pattern photobleaching. Active collagenase moves laterally on the substrate surface more slowly than inactive collagenase at both low and high surface coverages indicating the interplay between the processes of reaction and surface diffusion.

IT 78832-65-2DP, FALGPA, reaction products with silanized glass RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

ANSWER 26 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:31209 HCAPLUS

DOCUMENT NUMBER: 120:31209

TITLE: Evaluation of the .beta.-sheet-structure-stabilizing

potential of 20 kinds of amino acid residues in

protected deca- and pentadecapetides

Lee, Jin Shik; Murakawa, Yuka; Fujino, Kentarou; AUTHOR(S):

Narita, Mitsuaki

CORPORATE SOURCE: Fac. Technol., Tokyo Univ. Agric. Technol., Nakamachi,

184, Japan

Bulletin of the Chemical Society of Japan (1993), SOURCE:

66(8), 2283-8 CODEN: BCSJA8; ISSN: 0009-2673

DOCUMENT TYPE: Journal LANGUAGE: English

Deca- and pentadecapeptides Boc-[X-Ala-Glu(OCH2Ph)-Leu-Gly]n-OCH2COPh, [I; AΒ Boc = Me3CO2C, X = Ala, Arg(Mts), Asn, Asp(OCH2Ph), Cys(CH2Ph), Gln, Glu(OCH2Ph), Gly, His(CH2OCH2Ph), Ile, Leu, Lys(Z), Met(O), Phe, Pro, Ser(CH2Ph), Thr(CH2Ph), Trp(CHO), Tyr(CH2Ph), Val, n = 2, 3, Mts = 2-mesitylenesulfonyl, Z = PhCH2O2C] were prepd. by fragment condensation of the corresponding pentapeptides I (n = 1). The .beta.-sheet-structurestabilizing potentials [.ltbbrac.SP.beta.'.rtbbrac. values] of the guest amino acids in I (n = 2, 3) were evaluated by solvent titrn. to widen the application range of .ltbbrac.SP.beta..rtbbrac. values previously detd. from I (n = 1). The .ltbbrac.SP.beta.'.rtbbrac. values detd. from I (n = 2, 3) were different from the .ltbbrac.SP.beta..rtbbrac. values from I (n = 1). CD showed that I (n = 2, 3) adopted helix and random coil structures in org. solvents. The helix structure influences the solvation mechanism of these protected peptides.

ΙT 151264-92-5P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and .beta.-sheet conformational propensity of, in org. solvents)

ANSWER 27 OF 55 HCAPLUS COPYRIGHT 2003 ACS

1993:650478 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 119:250478

TITLE: The influence of .beta.-alanine and 4-aminobutyric acid residues on the solubility of peptides containing

them

Lee, Jin Shik; Murakawa, Yuka; Hanami, Akira; Narita, AUTHOR (S):

Mitsuaki

Fac. Technol., Tokyo Univ. Agric. Technol., Koganei, CORPORATE SOURCE:

184, Japan

Bulletin of the Chemical Society of Japan (1993), SOURCE:

66(7), 2006-10

CODEN: BCSJA8; ISSN: 0009-2673

DOCUMENT TYPE: LANGUAGE:

Journal English AB The influence of unnatural amino acid residues, i.e., .beta.-alanine (.beta.-Ala) and 4-aminobutyric acid (.gamma.-Aba) residues, on the soly. of peptides contg. them was studied in org. solvents. The difference between the solubilities of peptides contg. .beta.-Ala, .gamma.-Aba, Pro, Gly, Leu, and Asp(OCH2Ph) was investigated by the solvent titrn. method via IR. The order of their solubilities is as follows, peptides contg. Pro > .beta.-Ala > .gamma.-Aba > Asp(OCH2Ph) > Leu > Gly. The extremely high soly. of peptides contg. Pro residues is explained by the concept of peptide segment sepn. caused by the tertiary peptide bond of the Pro residue. The high soly. of peptides contg. .beta.-Ala or .gamma.-Aba residues is believed to be due to the difference of the geometries of the Gly, .beta.-Ala, and .gamma.-Aba residues. Their effective concn. seemed to be less important than their geometry. The role of .beta.-Ala and .gamma.-Aba residues in the soly. of peptides is similar to the role of Pro residues rather than Asp(OCH2Ph), Gly, and Leu residues.

IT 151264-92-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and soly. of, effect of .beta.-alanine and .gamma.-aminobutyric acid replacement on)

L4 ANSWER 28 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:473066 HCAPLUS

DOCUMENT NUMBER: 119:73066

TITLE: Multiple column peptide synthesis. Part 2

AUTHOR(S): Meldal, Morten; Holm, Charlotte Bisgaard; Bojesen,

Gustav; Jakobsen, Mogens Havsteen; Holm, Arne

CORPORATE SOURCE: Dep. Chem., Carlsberg Lab., Copenhagen, Den.

SOURCE: International Journal of Peptide & Protein Research

(1993), 41(3), 250-60

CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE: Journal LANGUAGE: English

AB A manually operated app. for parallel multiple column solid-phase peptide synthesis is described. It employs 9-fluorenylmethoxycarbonyl (Fmoc) amino acid 3,4-dihydro-4-oxo-1,2,3-benzotriazin-3-yl (Dhbt) or pentafluorophenyl (Pfp) esters in the continuous flow version of the polyamide method on small packed columns of kieselguhr supported resin in a reaction block of Teflon. The solvents and deprotecting reagents are dispensed from two washers in a parallel fashion and reagent consumption is low. Activated and protected amino acids are transferred from a dispenser tray as solns., 8 at a time. The use of the method is demonstrated by the synthesis of overlapping peptides from a protein structure and of analogous protease substrates. The products have been characterized by HPLC, fast-atom-bombardment mass spectrometry, and amino acid anal.

IT 148825-03-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, via multiple column solid-phase method)

L4 ANSWER 29 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:192247 HCAPLUS

DOCUMENT NUMBER: 118:192247

TITLE: Purification of synthetic peptides using reversible

chromatographic probes based on the Fmoc molecule

AUTHOR(S): Ball, H. L.; Mascagni, P.

CORPORATE SOURCE: Italfarmaco Res. Cent., Milan, Italy

SOURCE: International Journal of Peptide & Protein Research

(1992), 40(5), 370-9

CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE: Journal LANGUAGE: English

A rapid, reversible procedure for purifying synthetic peptides has been ΆB developed based on the specific incorporation of 9-(4carboxyfluorenyl)methoxycarbonyl (4-COR-Fmoc; R = lipophilic or charged group) group onto the terminal amino acid of peptidyl resins. The acid-stable 4-COR-Fmoc derivs. were synthesized with a variety of chem. groups, thus altering the chromatog. properties of the target peptides and permitting their convenient purifn., either by reversed-phase HPLC or ion exchange chromatog. The assembly of the peptides involved a capping step to prevent the formation of deletion forms. The 4-COR-Fmoc derivs. were incorporated either as preformed amino acid conjugates or as activated succinimidyl esters. After HF cleavage and purifn., the 4-COR-Fmoc probes were quant. removed with org. bases. The efficiency of the technique was demonstrated by the purifn. of small- to large-sized peptides, including a cyclic analog.

ΙT 147097-70-9P

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and purifn. and deprotection of, with org. base)

ANSWER 30 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1993:169618 HCAPLUS

DOCUMENT NUMBER:

118:169618

TITLE:

Preparation of a hexapeptide as angiotensin-converting

enzyme inhibitor.

INVENTOR(S):

Matsumura, Nobuyasu; Shimizu, Toshio Shadan Hojin Marino Foramu 21, Japan

PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 4 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ____ JP 04300894 A2 19921023 JP 1991-87267 19910328 PRIORITY APPLN. INFO.: JP 1991-87267

AΒ The solid-phase synthesis of H-Leu-Gly-Pro-Ala-Gly-Arg-OH from the appropriate Fmoc-protected amino acids as well as its isolation from tuna intestines are reported. In an in vitro study using hippurylhistidylleucine as the substrate, this hexapeptide had an IC50 of 1200 .mu.M against angiotensin-converting enzyme I.

146762-91-6P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and isolation of, from tuna intestines, as angiotensinconverting enzyme inhibitor)

ANSWER 31 OF 55 HCAPLUS COPYRIGHT 2003 ACS 1992:546002 HCAPLUS

ACCESSION NUMBER:

117:146002

DOCUMENT NUMBER:

TITLE:

Purification and substrate specificity of an

endopeptidase from the human oral spirochete Treponema denticola ATCC 35405, active on furylacryloyl-Leu-Gly-

Pro-Ala and bradykinin

AUTHOR(S):

Makinen, Kauko K.; Makinen, Pirkko Liisa; Syed, Salam

CORPORATE SOURCE:

Sch. Dent., Univ. Michigan, Ann Arbor, MI, 48109-1078,

Russel 09/520,856 Page 27

SOURCE: Journal of Biological Chemistry (1992), 267(20),

14285-93

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal LANGUAGE: English

An endopeptidase was purified to homogeneity from the cell exts. of T. denticola ATCC 35405 (a human oral spirochete) by a procedure that comprised dialysis, anion exchange fast protein liq. chromatog. (FPLC), hydroxylapatite FPLC, immobilized metal affinity FPLC, FPLC chromatofocusing, and two consecutive gel permeation FPLC steps. enzyme is a 62-kDa protein with an isoelec. point of 6.5-7.0. Expts. with enzyme inhibitors suggest that this enzyme is a metallopeptidase and that its activity is not dependent on sulfhydryl or serine residues. The enzyme is active on furylacryloyl-Leu-Gly-Pro-Ala (FALGPA; pH optimum near 6.25), bradykinin (Bk), and several Bk-related peptides. In FALGPA, the cleavage site is the Leu-Gly bond. An imino acid is absolutely necessary in position P'2. The shortest hydrolyzed peptide was FALGPA, the hydrolysis of which is strongly and competitively inhibited by Bk (K = 5.0.mu.M). The pyrophosphate ion and phosphoramidon also inhibited the hydrolysis of FALGPA. The enzyme does not hydrolyze all typical synthetic collagenase substrates, Azocoll, Azocasein, or Type I and Type IV collagens, or any other proteins tested. In Bk-related peptides, the hydrolyzed bond was Phe5-Ser6. Since a Bk antagonist and a Bk-potentiating pentapeptide also were good substrates, it is possible that the enzyme hydrolyzes Bks and related peptides only because of the coincidental, specific amino acid sequence of those substrates. A proposal is made that since a substantial portion of the amino acid. sequence of FALGPA is present in collagen (and addnl. acknowledging that the furylacryloyl residue structurally resembles that of proline), the natural substrates of this enzyme may be small, sol. collagen fragments produced by other enzymes from periodontal connective tissue, and that such peptides are important for the nutrition and pathogenicity of T. denticola.

78832-65-2 ΙT

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with endometallopeptidase of Treponema denticola, structure in relation to)

ANSWER 32 OF 55 HCAPLUS COPYRIGHT 2003 ACS 1992:543655 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 117:143655

Antagonist and agonist activities of synthetic peptide TITLE:

fragments of g-CSF and their protein conjugates

LoCastro, Stephen M.; Silvestri, Joanne S.; Lee, John AUTHOR(S):

C.; Laydon, Jeffrey T.; Bhatnagar, Pradip K.

Dep. Peptidomimetic Res., SmithKline Beecham Pharm., CORPORATE SOURCE:

King of Prussia, PA, 19460, USA

Pept.: Chem. Biol., Proc. Am. Pept. Symp., 12th (1992 SOURCE:

), Meeting Date 1991, 454-5. Editor(s): Smith, John A.; Rivier, Jean E.

ESCOM: Leiden, Neth.

CODEN: 57XGA9

Conference DOCUMENT TYPE:

English LANGUAGE:

The 1-10 and 95-106 peptide fragments of granulocyte-colony stimulating factor (g-CSF) were tested for agonist and antagonist activity. The 1-10, 95-106(Ala97), and 95-106(Ala101) fragments had no antagonist activity, whereas the 95-106(N-N dimer), 95-106(C-C dimer), 1-10 N/95-106C dimer, and 95-106(loop) had some antagonist activity, the 95-106 fragment had

moderate activity, and the $1-10\,(N-N\ dimer)$ had the greatest antagonist activity. However, when either the $1-10\ or\ 95-106$ fragment was conjugated with keyhole limpet hemocyanin or ovalbumin they acted as g-CSF agonists.

IT 143433-68-5D, protein conjugates

RL: BIOL (Biological study)

(granulocyte-colony stimulating factor agonist activity of)

IT 143433-68-5

RL: BIOL (Biological study)

(granulocyte-colony stimulating factor antagonist activity of)

L4 ANSWER 33 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1991:512651 HCAPLUS

DOCUMENT NUMBER:

115:112651

TITLE:

Peptides for induction of cytotoxin T-cell activation

for prophylaxis and therapy of acquired

immunodeficiency syndrome

INVENTOR(S):

Arlinghaus, Ralph B.

PATENT ASSIGNEE(S):

University of Texas System, USA

SOURCE:

PCT Int. Appl., 84 pp.

1

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

T: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9104045	A1	19910404	WO 1990-US5391	19900920
W: CA, JP				
RW: AT, BE,	CH, DE,	DK, ES,	FR, GB, IT, LU, NL, SE	
US 5128319	A	19920707	US 1989-410727	19890920
CA 2065402	AA	19910321	CA 1990-2065402	19900920
EP 491861	A1	19920701	EP 1990-914985	19900920
R: AT, BE,	CH, DE,	, DK, ES,	FR, GB, IT, LI, LU, NL,	SE
JP 05500517	Т2	19930204	JP 1990-514054	19900920
US 2002151678	A1	20021017	US 2001-911838	20010724
PRIORITY APPLN. INFO	. :		US 1989-410727 A	19890920
			US 1987-90646 B2	19870828
			WO 1990-US5391 W	19900920
			US 1992-834923 A1	19920213

Peptide multimers, consisting of peptides having .apprx.7-30 amino acid AB residues corresponding to a portion of a conserved domain of a core protein or gp160 envelope protein of human immunodeficiency virus (HIV), are used in an aq. compn. to immunize an immunocompetent animal and have the capacity to induce cytotoxic T-cell activation to the HIV protein but lack the capacity to induce antibodies that immunoreact with the native HIV protein. The multimers are formed by bonding the peptides through oxidized cysteine residues at the termini of the peptides. Alternatively, the peptides form micelles after reaction of a C12-18 fatty acid with the .alpha.- and .epsilon.-amino groups of an amino-terminal lysyl residue of a peptide spacer added to the amino-terminus of the peptides. Activated cytotoxic T-cells are used to kill target cells that exhibit an HIV protein or peptide on their cell surfaces. Five peptides in their disulfide polymeric form were very good immunogens for eliciting a strong T-cell response directed against both the corresponding peptide and the native gp160. These peptides did not stimulate anti-peptide antibody prodn.

IT 124859-55-8

RL: BIOL (Biological study)

(peptide of conserved domain of AIDS virus core protein, multimer contg., for induction of cytotoxic T-cell activation for AIDS therapy)

ANSWER 34 OF 55 HCAPLUS COPYRIGHT 2003 ACS

1991:159650 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

114:159650

TITLE:

A quenched fluorescent substrate for thimet peptidase

containing a new fluorescent amino acid,

DL-2-amino-3-(7-methoxy-4-coumaryl)propionic acid

Knight, C. Graham AUTHOR(S):

CORPORATE SOURCE:

Dep. Biochem., Strangeways Res. Lab., Cambridge, CB1

4RN, UK

SOURCE:

Biochemical Journal (1991), 274(1), 45-8

CODEN: BIJOAK; ISSN: 0306-3275

DOCUMENT TYPE:

Journal English

LANGUAGE:

DL-2-Amino-3-(7-methoxy-4-coumaryl)propionic acid, a new fluorescent amino acid (abbreviated to Amp), has been synthesized to provide an alternative to tryptophan in quenched fluorescent peptide substrates for peptidases. The model compd. Ac-DL-Amp-NH2 was intensely fluorescent with an excitation max. at 328 nm and an emission max. at 392 nm. Fmoc (fluoren-9-ylmethoxycarbonyl)-DL-Amp was made to allow the solid-phase synthesis of Amp-contg. peptides by the Fmoc-polyamide method. The peptide deriv. Dnp (2,4-dinitrophenyl)-Pro-Leu-Gly-Pro-DL-Amp-D-Lys was cleaved by thimet peptidase at the Leu-Gly bond, with a 20-fold enhancement of fluorescence. The value of kcat/Km for thimet peptidase was 6.7 .times. 105 M-1 s-1, compared with the value of 2.4 .times. 105 M-1 s-1 for the tryptophan-contg. analog, Dnp-Pro-Leu-Gly-Pro-Trp-D-Lys.

IT 133083-35-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and thimet peptidase hydrolysis of)

ANSWER 35 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1990:115491 HCAPLUS

DOCUMENT NUMBER:

112:115491

TITLE:

Hydrolysis of the Leu-Gly bond of

phenylazobenzyloxycarbonyl-L-Pro-L-Leu-Gly-L-Pro-D-Arg (a substrate of microbial collagenases) by treponemes isolated from the subgingival plaque of periodontitis

patients

AUTHOR(S):

Makinen, Kauko K.; Syed, Salam A.; Salvador, Sergio

L.; Makinen, Pirkko Liisa

CORPORATE SOURCE:

Sch. Dent., Univ. Michigan, Ann Arbor, MI, 48109-1078,

SOURCE:

Current Microbiology (1990), 20(1), 69-74

CODEN: CUMIDD; ISSN: 0343-8651

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Cell exts. prepd. from several oral treponemes isolated from the subgingival plaque of periodontitis patients showed high enzyme activity toward phenylazobenzyl-oxycarbonyl-L-prolyl-L-leucylglycyl-L-prolyl-Darginine (a compd. used as a substrate for microbial collagenases). major enzyme hydrolyzing this substrate at the Leu-Gly bond only was partially purified from an unspeciated treponeme (strain US), Treponema denticola ATCD 35405, and 29 different clin. isolates of T. denticola. The Treponema US enzyme also hydrolyzed furylacryloyl-L-leucylglycyl-Lprolyl-L-alanine (another substrate of bacterial collagenases) at the Leu-Gly bond. This enzyme also hydrolyzed various collagen-derived

peptides. These treponemal proteases were sensitive to metal chelators and p-chloromercury compds. The results indicate that human oral treponemes contain enzymes that readily hydrolyze in chromogenic protease substrates the Leu-Gly bond only that is the cleavage site of these substrates also by true microbial collagenases.

IT 78832-65-2

RL: RCT (Reactant); RACT (Reactant or reagent) (hydrolysis of, by oral Treponema, collagenase in)

L4 ANSWER 36 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:62598 HCAPLUS

DOCUMENT NUMBER: 112:62598

TITLE: Prophylaxis and therapy of AIDS, using a

peptide-containing vaccine

INVENTOR(S): Arlinghaus, Ralph B.

PATENT ASSIGNEE(S): University of Texas System, USA

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT	NO.	KIND	DATE		APPLICAT	ON NO.	DATE	^
WO 8902	A2	19890323		WO 1988-0	19880826			
WO 8902	WO 8902277		19890518					
W:	AT, AU	, BB, BG,	BR, CH,	DE, DI	K, FI, GB,	ни, је	, KP, KR,	LK, LU,
	MC, MG	, MW, NL,	NO, RO,	SD, SI	E, SU			
RW:	AT, BE	, BJ, CF,	CG, CH,	CM, DI	E, FR, GA,	GB, IT,	LU, ML,	MR, NL,
	SE, SN	, TD, TG						
AU 8929	148	A1	19890417		AU 1989-2	29148	19880826	
US 2002	151678	A1	20021017		US 2001-9	911838	20010724	
PRIORITY APP	LN. INF	o.:		US	1987-9064	16 A	19870828	
				WO	1988-US29	970 A	19880826	
				US	1989-4107	27 A3	19890920	
				US	1992-8349	923 A1	19920213	

AB A process is given for inducing resistance of an individual to infection by HIV (human immunodeficiency virus). The process involves vaccinating the individual with a synthetic peptide or mixt. of peptides. The synthetic peptide(s) comprises an amino acid sequence derived at least in part from HIV envelope protein conserved region. Upon antigenic presentation to an animal, this peptide induces directed cell-mediated immunity (i.e., T-cell cytotoxicity) to a substantially greater extent than prodn. of antibody directed against native HIV is elicited. The vaccine of the present invention comprises a synthetic peptide having an amino acid sequence derived in part from T-cell epitopes of HIV envelope protein conserved region and preferably consists exclusively of T-cell epitopes. The peptides may be synthesized by conventional solid- or liq.-phase methods or by recombinant DNA techniques (no data).

IT 124859-55-8

RL: BIOL (Biological study)

(of human immunodeficiency virus envelope protein conserved region, vaccine contg., for AIDS treatment)

L4 ANSWER 37 OF 55 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1988:524938 HCAPLUS

DOCUMENT NUMBER: 109:124938

TITLE: Preparation by direct metal exchange and kinetic study

AUTHOR(S):

of active site metal substituted class I and class II

Clostridium histolyticum collagenases Angleton, Eddie L.; Van Wart, Harold E.

CORPORATE SOURCE: Inst. Mol. Biophys., Florida State Univ., Tallahassee,

FL, 32306, USA

SOURCE: Biochemistry (1988), 27(19), 7413-18

CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal LANGUAGE: English

Active site metal substitutions for the Zn-contg. .gamma.- and .zeta.-collagenases from C. histolyticum were made by direct metal exchange. The incubation of Co(II), Cu(II), Ni(II), Cd(II), and Hg(II) with the native collagenases resulted in changes in activity that paralleled those obsd. for the reconstitution of the resp. apoenzymes with these metal ions. For both collagenases, the exchange reactions with Co(II) and Cu(II) were complete within 1 min. However, the changes in activity obsd. on addn. of Ni(II), Cd(II), and Hg(II) to .gamma.-collagenase and Cd(II) and Hg(II) to .zeta.-collagenase were time-dependent. The kinetic parameters, kcat and Km, were detd. for each of the active metal-substituted species. The substitution of the active-site metal ion in .gamma.-collagenase changed both the kcat and Km, whereas the effect obsd. in .zeta.-collagenase was primarily on the Km. This suggests that there are differences in the mechanisms of these 2 collagenases, at least with respect to the role of Zn(II) in catalysis.

IT 78832-65-2

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with .gamma.- and .zeta.-collagenases of Clostridium histolyticum, kinetics of)

L4 ANSWER 38 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:402885 HCAPLUS

DOCUMENT NUMBER: 109:2885

TITLE: Ketone-substrate analogues of Clostridium histolyticum

collagenases: tight-binding transition-state analogue

inhibitors

AUTHOR(S): Mookhtiar, Kasim A.; Grobelny, Damian; Galardy,

Richard E.; Van Wart, Harold E.

CORPORATE SOURCE: Inst. Mol. Biophys., Florida State Univ., Tallahassee,

FL, 32306, USA

SOURCE: Biochemistry (1988), 27(12), 4299-304

CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal LANGUAGE: English

AB A series of ketone substrate analogs was synthesized for the 2 classes of collagenases from C. histolyticum and shown to be competitive inhibitors. These compds. had sequences that matched those of specific peptide substrates for these enzymes. The best inhibitor was the ketone analog of cinnamoyl-Leu-Gly-Pro-Pro, which had a Ki of 18 nM for .epsilon.-collagenase, a class II enzyme. This was the tightest binding inhibitor reported for any collagenase to date. Plots of log Ki for the inhibitors vs. log KM/kcat (where kcat = catalytic const.) for the matched substrates for both collagenases were linear with slopes near unity, indicating that the ketones are transition-state analogs. This strongly implies that the ketone C atoms of these inhibitors are tetrahedral when bound to the enzymes.

IT 96595-84-5 96596-31-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with collagenases of Clostridium histolyticum, kinetics
 of)

L4 ANSWER 39 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:218111 HCAPLUS

DOCUMENT NUMBER: 108:218111

TITLE: New thiol inhibitors of Clostridium histolyticum

collagenase. Importance of the P3' position

AUTHOR(S): Yiotakis, Athanasios; Hatgiyannacou, Athina; Dive,

Vincent; Toma, Flavio

CORPORATE SOURCE: Lab. Org. Chem., Univ. Athens, Athens, Greece

SOURCE: European Journal of Biochemistry (1988), 172(3), 761-6

CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE: Journal LANGUAGE: English

AB An extensive series of synthetic mercaptotripeptides (HS-CH2-CH2-CO-Pro-Yaa, where Yaa is in amino acid) was prepd., and the Ki values were detd. on the C. histolyticum collagenase. Among the factors which control the optimal binding of these inhibitors, the presence of a free C-terminal carboxylate group in the position P3' of the compds. is of primary importance. In general, the esterification of this carboxylate group decreased the potency of the inhibitors by 2 orders of magnitude. Also the enzyme favored the inhibitors having a long linear apolar or basic side-chain at position P3'. These data suggest a large S3' subsite of the C. histolyticum collagenase. The compd. which contains a homoarginine residue at the P3' position, proved to be the most potent synthetic inhibitor known to date for the C. histolyticum collagenase, with a Ki of 0.2 .mu.M.

IT 78832-65-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with collagenase of Clostridium histolyticum, kinetics of)

L4 ANSWER 40 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:200828 HCAPLUS

DOCUMENT NUMBER: 108:200828

TITLE: A monoclonal antibody recognizing the site of limited

proteolysis of protein kinase C. Inhibition of

down-regulation in vivo

AUTHOR(S): Young, Susan; Rothbard, Johnathan; Parker, Peter J.

CORPORATE SOURCE: Imp. Cancer Res. Fund, London, UK

SOURCE: European Journal of Biochemistry (1988), 173(1),

247-52

CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A monoclonal antibody to protein kinase C (I) is described that recognizes the site of limited proteolysis on the native enzyme. The binding of the antibody to the purified I in vitro blocked partial proteolysis by trypsin, and introduction of the Fab fragment into a rodent glioma cell line inhibited phorbol ester-induced down-regulation of I. These observations were discussed in the context of the domain structure of I and the agonist-induced proteolysis of I in vivo.

IT 114454-63-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

L4 ANSWER 41 OF 55 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1987:591131 HCAPLUS

DOCUMENT NUMBER: 107:191131

TITLE: QSAR for peptide bioactivities. Further studies

AUTHOR(S):

SOURCE:

Charton, M.; Charton, B. I.

CORPORATE SOURCE:

Chem. Dep., Pratt Inst., Brooklyn, NY, 11205, USA Pharmacochemistry Library (1987), 10 (QSAR Drug Des.

Toxicol.), 285-90

CODEN: PHLIDQ; ISSN: 0165-7208

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The biol. activities of several sets of enkephalin analogs were successfully correlated with their structural variations by using the intermol. force (IMF) equation which accounts for properties such as polarizability, H bonding, side chain charge, and steric parameters. results support the validity of the IMF equation as a general method for the quant. description of biol. activity as a function of structure.

111110-11-3 111110-12-4 111110-30-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(hydrolysis of, by .beta.-collagenase, structure in relation to)

ANSWER 42 OF 55 HCAPLUS COPYRIGHT 2003 ACS L4

ACCESSION NUMBER: 1986:621504 HCAPLUS

DOCUMENT NUMBER: 105:221504

New thiol inhibitor of Achromobacter iophagus TITLE:

collagenase. Specificity of the enzyme's S3' subsite

Yiotakis, Athanasios; Dive, Vincent AUTHOR(S):

Dep. Biol., Cent. Etud. Nucl. Saclay, Gif-sur-Yvette, CORPORATE SOURCE:

F-91191, Fr.

European Journal of Biochemistry (1986), 160(2), SOURCE:

413-18

CODEN: EJBCAI; ISSN: 0014-2956

DOCUMENT TYPE: Journal

English LANGUAGE:

New synthetic mercaptotripeptides (HS-CH2-CH2-CO-Pro-Yaa) [Yaa (P3' position) = alanine, leucine, phenylalanine, proline, or hydroxyproline] which inhibit A. iophagus collagenase were produced to obtain more powerful bacterial collagenase inhibitors than currently available and to investigated the specificity of the S3' subsite of the enzyme. Since similar binding consts. were found for inhibitors carrying uncharged residues of various sizes in the P3' position, steric hindrance at the collagenase S3' appears relatively limited. HS-CH2-CH2-CO-Pro-Arg had a Ki of 0.5 .mu.M for the enzyme and was the strongest inhibitor so far reported in the literature. The weakest in the present series was HS-CH2-CH2-CO-Pro-Asp, which had a Ki of 70 .mu.M. Thus, the charged groups in the P3' position play a key role in the interaction of the inhibitors with the enzyme.

78832-65-2 IT

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with collagenase of Achromobacter iophagus, kinetics of)

ANSWER 43 OF 55 HCAPLUS COPYRIGHT 2003 ACS

1985:592081 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 103:192081

Complementary substrate specificities of class I and TITLE:

class II collagenases from Clostridium histolyticum

Van Wart, Harold E.; Steinbrink, D. Randall AUTHOR(S):

Dep. Chem., Florida State Univ., Tallahassee, FL, CORPORATE SOURCE:

32306, USA

Biochemistry (1985), 24(23), 6520-6 SOURCE:

CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal LANGUAGE: English AB The substrate specificities of 3 class I (.beta., .gamma., and .eta.) and 3 class II (.delta., .epsilon., and .xi.) collagenases from C. histolyticum were investigated by quantitating the kcat/Km values (kcat is the catalytic const.) for the hydrolysis of 53 synthetic peptides with collagen-like sequences covering the P3 through P3' subsites of the substrate. For both classes of collagenases, there was a strong preference for glycine in subsites P1' and P3. All 6 enzymes also preferred substrates that contained proline or alanine in subsites P2 and P2' and hydroxyproline, alanine, or arginine in subsite P3'. This agreed well with the occupancies of these sites by these residues in type I collagen. However, peptides with glutamate in subsites P2 or P2' were not good substrates, even though glutamate occurs frequently in these positions in collagen. Conversely, all 6 enzymes preferred arom. amino acids in subsite P1, even though such residues do not occur in this position in type I collagen. In general, the class II enzymes had a broader specificity than the class I enzymes. However, they were much less active toward sequences contq. hydroxyproline in subsites P1 and P3'. Thus, the 2 classes of collagenases have similar but complementary sequence specificities. This accounts for the ability of the 2 classes of enzymes to synergistically digest collagen.

IT 78832-65-2 96595-84-5 96596-31-5

RL: BIOL (Biological study)

(collagenase multiple forms of Clostridium histolyticum specificity for)

L4 ANSWER 44 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:418900 HCAPLUS

DOCUMENT NUMBER: 103:18900

TITLE: Clostridium histolyticum collagenase: development of

new thio ester, fluorogenic, and depsipeptide

substrates and new inhibitors

AUTHOR(S): Vencill, Charles F.; Rasnick, David; Crumley,

Katherine V.; Nishino, Norikazu; Powers, James C. Sch. Chem., Georgia Inst. Technol., Atlanta, GA,

30332, USA

SOURCE: Biochemistry (1985), 24(13), 3149-57

CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

A new series of thio ester, depsipeptide, and peptide substrates was synthesized for C. histolyticum collagenase. The hydrolysis of the depsipeptide substrate was followed on a pH stat, and thio ester hydrolysis was measured by inclusion of the chromogenic thiol reagent 4,4'-dithiodipyridine in the assay mixt. The best thio ester substrate, Boc-Abz-Gly-Pro-Leu-SCH2CO-Pro-Nba (Boc = tert-butyloxycarbonyl; Nba = 4-nitrobenzylamide; Abz = 2-aminobenzoyl), had a catalytic const. (kcat)/km of 63,000 M-1 s-1, whereas several shorter thio ester sequences were inactive as substrates. In general, the peptide analogs of all of the reactive thio ester substrates where hydrolyzed 5-10-fold faster by collagenase. In one case (Z-Gly-Pro-Leu-Gly-Pro-NH2) (Z = $\frac{1}{2}$ benzyloxycarbonyl) where a comparison was made, the peptide substrate was resp. 10- and 100-fold more readily hydrolyzed than the corresponding thio ester and ester substrates. Cleavages of the 2 fluorescence-quench substrates Abz-Gly-Pro-Leu-Gly-Pro-Nba and Abz-Gly-Pro-Leu-SCH2CO-Pro-Nba could be easily followed fluorogenically since a 5-10-fold increase in fluorescence occurred upon hydrolysis. The fluorescent peptide substrate is the best synthetic substrate known for C. histolyticum collagenase with a kcat/Km of 490,000 M-1 s-1. A series of new reversible inhibitors were developed by the attachment of Zn-ligating groups (hydroxamic acid,

Russel 09/520,856 Page 35

carboxymethyl, and thiol) to various peptide sequences specific for C. histolyticum collagenase. The shorter peptides designed to bond to either the P3-P1 or P1'-P3' subsites were poor to moderate inhibitors. The thiol HSCH2CH2CO-Pro-Nba had the lowest Ki (0.02 mM). Elongation of N-hydroxy peptide sequences to interact with the P3-P3' subsites of the enzyme failed to yield better inhibitors. None of the potential irreversible inhibitor structures, which contained C1CH2CO- or CH2:CH-CO- groups attached to peptides, proved to be effective.

IT 96194-15-9

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with collagenase of Clostridium histolyticum, kinetics
 of)

L4 ANSWER 45 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1985:217337 HCAPLUS

DOCUMENT NUMBER: 102:217337

TITLE: Substrate specificity of .beta.-collagenase from

Clostridium histolyticum

AUTHOR(S): Steinbrink, D. Randall; Bond, Michael D.; Van Wart,

Harold E.

CORPORATE SOURCE: Dep. Chem., Florida State Univ., Tallahassee, FL,

32306, USA

SOURCE: Journal of Biological Chemistry (1985), 260(5), 2771-6

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal LANGUAGE: English

The substrate specificity of .beta.-collagenase of C. histolyticum was AB investigated by measuring the rate of hydrolysis of >50 tri-, tetra-, penta-, and hexapeptides covering the P3 to P3' subsites of the substrate. The choice of peptides was patterned after sequences found in the .alpha.1 and .alpha.2 chains of type I collagen. Each peptide contained either a 2-furanacryloyl (FA) or cinnamoyl (CN) group in subsite P2 or the 4-nitrophenylalanine (Nph) residue in subsite P1. Hydrolysis of the P1-P1' bond produced an absorbance change in these chromophoric peptides that was used to quantitate the rates of their hydrolysis under 1st-order conditions ([S] .mchlt. Km) from which catalytic const. (kcat)/Km values were obtained. The identity of the amino acids in all 6 subsites (P3-P3') markedly influenced the hydrolysis rates. In general, the best substrates had glycine in subsites P3 and P1', proline or alanine in subsite P2' and hydroxyproline, arginine, or alanine in subsite P3'. This corresponded well with the frequency of occurrence of these residues in the Gly-X-Y triplets of collagen. In contrast, the most rapidly hydrolyzed substrates did not have residues from collagen-like sequences in subsites P2 and P1. CN-Nph-Gly-Pro-Ala (CN = cinnamoyl; Nph = 4-nitrophenylalanine) was the best known substrate for .beta.-collagenase with a kcat/Km of 4.4 .times. 107 M-1 min-1, in spite of the fact that there was neither hydroxyproline, arginine, or alanine in P1. These results indicated that the previously established rules for the substrate specificity of the enzyme require modification.

IT 96596-39-3

IT

RL: RCT (Reactant); RACT (Reactant or reagent) (deprotection of)

78832-65-2P 96595-84-5P 96596-31-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and .beta.-collagenase of Clostridium histolyticum specificity for)

IT 96596-40-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (sapon. of)

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L4 ANSWER 46 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:402780 HCAPLUS

DOCUMENT NUMBER: 101:2780

TITLE: Characterization of the individual collagenases from

Clostridium histolyticum

AUTHOR(S): Bond, Michael D.; Van Wart, Harold E.

CORPORATE SOURCE: Inst. Mol. Biophys., Florida State Univ., Tallahassee,

FL, 32306, USA

SOURCE: Biochemistry (1984), 23(13), 3085-91

CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal LANGUAGE: English

Six collagenases (.alpha., .beta., .gamma., .delta., .epsilon., and .zeta.) purified from C. histolyticum were characterized in detail. mol. wts. detd. by SDS-polyacrylamide gel electrophoresis ranged from 68,000 to 125,000. Isoelec. focusing expts. demonstrated that the pI values of the collagenases were in the 5.35-6.20 range. These expts. also revealed that the subspecies of .alpha. - and .gamma. -collagenases (.alpha.1 vs. .alpha.2 and .gamma.1 vs. .gamma.2) had different pI values, but the same mol. wts. Microheterogeneity was also obsd. for the .beta.and .epsilon.-collagenases. The amino acid compns. of all 6 collagenases were detd., and anal. for neutral sugars and hexosamines showed that none of the enzymes had a significant carbohydrate content. In and Ca were the only metals that copurified with the collagenases. The purified enzymes contained .apprx.1 mol Zn/mol protein and a Ca content that varied from .apprx.2 mol/mol for .alpha.-collagenase to .apprx.7 mol/mol for .beta.-collagenase. All of the collagenases are 5-10-fold more active against gelatin than collagen. The .alpha.-, .beta.-, and .gamma.-collagenases were significantly less active toward the synthetic peptide substrates examd. than the .delta.-, .epsilon.-, and .zeta.-collagenases. This property, taken together with data on the stabilities and amino acid compns. of these enzymes, strongly supported their assignment to 2 distinct classes. This established clearly that C. histolyticum does, indeed, produce >1 different type of collagenase.

78832-65-2
RL: BIOL (Biological study)

IT

(collagenase multiple forms of Clostridium specificity for, classification in relation to)

L4 ANSWER 47 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:402779 HCAPLUS

DOCUMENT NUMBER: 101:2779

TITLE: Purification and separation of individual collagenases

of Clostridium histolyticum using red dye ligand

chromatography

AUTHOR(S): Bond, Michael D.; Van Wart, Harold E.

CORPORATE SOURCE: Inst. Mol. Biophys., Florida State Univ., Tallahassee,

FL, 32306, USA

SOURCE: Biochemistry (1984), 23(13), 3077-85

CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal LANGUAGE: English

AB Six collagenases present in the culture filtrate of C. histolyticum were purified to homogeneity. Chromatog. on hydroxylapatite, Sephacryl S-200, and L-arginine-Affi-Gel 202 removed the brown pigment and the great majority of the contaminating proteinases active against casein, benzoyl-L-arginine Et ester, and elastin. Reactive Red 120 dye ligand chromatog. subdivided the collagenases, which had very similar

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physicochem. properties, among 4 fractions. The final purifn. was achieved by chromatog. over DEAE-cellulose and SP-Sephadex. collagenases, designated .alpha., .beta., .gamma., .delta., .epsilon., and .zeta. by the order of their purifn., were highly active against collagen and devoid of other proteolytic activities. Each exhibited a single band on SDS-polyacrylamide gels. Two distinct subspecies of the .alpha. and .gamma. enzymes were isolated, which had the same mol. wt. and activity, but different pI values. There was some less pronounced microheterogeneity for the other collagenases. On the basis of their activities toward native collagen and the synthetic peptide 2-furanacryloyl-L-leucylglycyl-L-prolyl-L-alanine (FALGPA), the 6 collagenases were divided into 2 classes. Class I collagenases (.alpha., .beta., and .gamma.) had high collagenase activity and moderate FALGPA activity, whereas the class II collagenases (.delta., .epsilon., and .zeta.) had moderate collagenase and high FALGPA activities. The relation between these 6 collagenases and others reported to have been isolated in the literature was also examd.

ΙT 78832-65-2

RL: BIOL (Biological study)

(collagenase multiple forms of Clostridium specificity for, classification in relation to)

ANSWER 48 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1983:518322 HCAPLUS

DOCUMENT NUMBER:

99:118322

TITLE:

Inhibition of the collagenase from Clostridium

histolyticum by phosphoric and phosphonic amides

AUTHOR(S): Galardy, Richard E.; Grobelny, Damian

Sanders-Brown Res. Cent. Aging, Univ. Kentucky, CORPORATE SOURCE:

Lexington, KY, 40536, USA Biochemistry (1983), 22(19), 4556-61 SOURCE:

CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English Di- and tripeptides with sequences present in collagen that are known to occupy the S1' through S3' subsites at the active site of the collagenase from C. histolyticum do not themselves inhibit this Zn-contg. protease. Thus, Gly-Pro, Gly-Pro-Ala, and their C-terminal amides are not inhibitors. N.alpha.-Phosphoryl-Gly-Pro, N.alpha.-phosphoryl-Gly-L-Pro-L-Ala, and their C-terminal amides are weak inhibitors with IC50 values (concn. causing half-maximal inhibition) of 4.6, 0.8, 3, and 1.5 mM, resp. Extension of Gly-L-Pro-L-Ala to L-Leu-Gly-L-Pro-L-Ala gives a tetrapeptide known to occupy the S1, S1', S2', and S3' subsites of collagenase when present in collagen, but that still does not itself inhibit the enzyme. (Isoamylphosphonyl)Gly-L-Pro-L-Ala, a peptide contg. a tetrahedral P atom at the position of the amide carbonyl C atom of the L-Leu-Gly amide bond of the parent tetrapeptide, inhibits collagenase with an IC50 of 16 .mu.M, .qtoreq.1000-fold more potent than the parent peptide. Substitution of the 2-C Et chain of alanine for the 5-C isoamyl chain of leucine increases the IC50 to 46 .mu.M. Substitution of the n-decyl chain for the isoamyl chain does not change the IC50. (Isoamylphosphonyl)Gly-Gly-L-Pro contains a tripeptide that does not occupy the S1' through S3' subsites of collagenase when this peptide is present in collagen and thus has an IC50 of 4.4 mM. (Isoamylphosphonyl)Gly-L-Pro-L-Ala may be an analog of the tetrahedral transition state for the hydrolysis of the natural collagen substrate. However, the IC50 of this inhibitor is 3-4 orders of magnitude higher than those of the best P-contg. transition-state analogs of other Zn-contg. proteases. In addn., this inhibitor lacks specificity for its target, having a Ki for angiotensin-converting enzyme of 11 .mu.M, about

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equal to its IC50 for collagenase.

IT 86563-79-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and angiotensin-converting enzyme inhibition by)

IT 86563-77-1P

L4 ANSWER 49 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1982:577203 HCAPLUS

DOCUMENT NUMBER: 97:177203

TITLE: Conformational preferences of amino acid side chains

in collagen

AUTHOR(S): Nemethy, George; Scheraga, Harold A.

CORPORATE SOURCE: Baker Lab. Chem., Cornell Univ., Ithaca, NY, 14853,

USA

SOURCE: Biopolymers (1982), 21(8), 1535-55

CODEN: BIPMAA; ISSN: 0006-3525

DOCUMENT TYPE: Journal LANGUAGE: English

Conformation energy computations were carried out on collagen-like triple-stranded conformations of several poly(tripeptide)s with the general structure CH3CO-(Gly-X-Y)3-NHCH3. The sequences considered had various amino acid residues in position X or Y of the central tripeptide, with either proline (Pro) or alanine as a neighbor, i.e., Gly-X-Pro, Gly-X-Ala, Gly-Pro-Y, and Gly-Ala-Y. Min. energy conformations were computed for the side chains, and their distributions were compared for the 4 sequences. The residues used were .alpha.-aminobutyric acid (Abu), leucine, phenylalanine, serine, aspartate (Asp), asparagine (Asn), valine, isoleucine, and threonine. The conformational energy of a -CH2-CH3 side chain in Abu was mapped as a function of the dihedral angle. interactions with neighboring residues do not affect the conformations of a side chain in position Y, and they have a minor effect on it in the X-Ala sequence, but they strongly restrict the conformational freedom of the side chain in the X-Pro sequence. Conversely, interstrand interactions do not affect side chains in position X, but they strongly restrict the conformational freedom of a side chain in position Y if there is a nearby Pro residue in a neighboring strand. H bonds with the backbone can be formed in some conformations of long polar side chains, such as Asp, Asn, or glutamine. All amino acid residues can be accommodated in collagen. Because of the interactions mentioned above, steric and energetic constraints can be correlated with obsd. preferences of certain amino acids for positions X or Y in collagen. Hence, there preferences may be explained, in part, in terms of differences in the conformational freedom of the side chains in the triple-stranded structure.

IT 83387-70-6

RL: BIOL (Biological study)

(conformation preference of triple-stranded)

L4 ANSWER 50 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1981:492793 HCAPLUS

DOCUMENT NUMBER: 95:92793

TITLE: A continuous spectrophotometric assay for Clostridium

histolyticum collagenase

AUTHOR(S): Van Wart, Harold E.; Randall Steinbrink, D.

CORPORATE SOURCE: Dep. Chem., Florida State Univ., Tallahassee, FL,

32306, USA

SOURCE: Analytical Biochemistry (1981), 113(2), 356-65

CODEN: ANBCA2; ISSN: 0003-2697

DOCUMENT TYPE: Journal LANGUAGE: English

A continuously recording spectrophotometric assay for C. histolyticum collagenase with 2-furanacryloyl-L-leucylglycyl-L-prolyl-L-alanine (I) as substrate was developed. The hydrolysis of this peptide by collagenase obeys Michaelis-Menten kinetics with a Vmax of 1.8 .times. 105 .mu.katal/kg and a Km of 0.5 mM. I is hydrolyzed more rapidly by collagenase than any other commonly used synthetic substrate, but is not cleaved by any of the well-known proteinases, such as trypsin, thermolysin, or elastase. The assay itself is rapid, convenient, and sensitive, and should greatly facilitate detailed kinetic studies of collagenase.

ΙT 78832-65-2

> RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with collagenase, kinetics of)

ANSWER 51 OF 55 HCAPLUS COPYRIGHT 2003 ACS

1975:156705 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 82:156705

Preparation and mass spectra of azulene peptides and TITLE:

their use for the analysis of synthetic peptides

AUTHOR(S): Jaeger, Ernst; Wuensch, Erich

CORPORATE SOURCE: Max-Planck-Inst. Eiweiss Lederforsch., Munich, Fed.

Rep. Ger.

Prog. Pept. Res., [Proc. Am. Pept. Symp.], 2nd (1972), Meeting Date 1970, 151-8. Editor(s): Lande, Saul. SOURCE:

Gordon and Breach: New York, N. Y.

CODEN: 29USAB Conference

DOCUMENT TYPE: English LANGUAGE:

For diagram(s), see printed CA Issue. GΙ

The amino protective group, (7-isopropyl-1-methyl-4-azulyl)acetyl (MIAA), facilitated sepn. of peptides by extn. and thin-layer chromatog. and allowed a quant. and qual. detn. of the peptide by photometric and mass spectral anal. Coupling 7-isopropyl-1-methyl-4-azuleneacetic acid (I) with L-proline Me ester in CH2Cl2 and dicyclohexylcarbodiimide gave the Me ester of II. Leu-Gly-Pro-Ala-OMe was coupled with II to give MIAA-Pro-Leu-Gly-Pro-Ala-OMe, which was volatile in a mass spectrometer between 80.degree. and 220.degree..

55260-05-4 IT

> RL: RCT (Reactant); RACT (Reactant or reagent) (peptide coupling reactions of, with isopropylmethylazulylacetyl blocked amino acids)

35866-17-2 55260-03-2 55260-04-3 ΙT

> RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. absorption and mass spectrum of)

ANSWER 52 OF 55 HCAPLUS COPYRIGHT 2003 ACS

1972:458236 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 77:58236

Specificity of bacterial collagenase. Studies with TITLE:

peptides newly synthesized using the solid-phase

method

Soberano, Mercedes E.; Schoellmann, Guenther AUTHOR(S):

Sch. Med., Tulane Univ., New Orleans, LA, USA CORPORATE SOURCE:

Biochimica et Biophysica Acta (1972), 271(1), 133-44 SOURCE:

CODEN: BBACAQ; ISSN: 0006-3002

DOCUMENT TYPE: LANGUAGE:

Journal English

The method of solid-phase synthesis was followed in the prepn. of 7 new oligopeptides which were used to study the specificity requirements of clostridiopeptidase A (EC 3.4.4.19). The newly synthesized peptides were structural and stereochem. modifications of the collagen-like sequence -Pro-X-Gly-Pro-Y-. It was shown that with the enzyme prepn. used, the Y-Gly bond in sequences like -Gly-X-Y-Gly-Pro-Z- or -Gly-X-Y-Gly-Z-Procan be cleaved. This obsd. lack of specificity might be due to the presence of a collagenase with a broader specificity in the prepn. utilized in this study or, alternatively, could be accounted for by an inherent property of the subunit-contg. enzyme which allows the accommodation of some structural variations and shows, therefore, less specificity than originally was proposed.

ΙT 37058-26-7

> RL: BIOL (Biological study) (reaction with collagenase)

ANSWER 53 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1972:22421 HCAPLUS

DOCUMENT NUMBER:

76:22421

TITLE:

SOURCE:

Chromophoric substrates. VIII. Mass spectrometric

studies on N-[(azulen-4-yl)acetyl]peptides

AUTHOR(S):

Wuensch, Erich; Jaeger, Ernst CORPORATE SOURCE:

Abt. Peptidchem., Max-Planck-Inst.

Eiweiss-Lederforsch., Munich, Fed. Rep. Ger.

Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie

(1971), 352(11), 1584-90 CODEN: HSZPAZ; ISSN: 0018-4888

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Azulene chromophoric substrates prove to be particularly appropriate for a AB precise identification of the chromophore-contg. cleavage products which result from an enzymic hydrolysis: they permit a rapid and unequivocal localization of the enzyme attack. If the substances are rather volatile or made so by esterification, the spectra of N-[(7-isopropyl-1methylazulen-4-yl)acetyl]amino acid or peptide derivs. show surprisingly intensive mol. ions and rather low fragmentation in the upper mass region. A precise identification of the N-terminal cleavage products is thus The techique is also very useful for an exact and fast examn. of the single reaction steps during the synthesis of such chromophoric substrates.

ΙT 35866-17-2

> RL: PRP (Properties) (mass spectrum of)

ANSWER 54 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1972:22399 HCAPLUS

DOCUMENT NUMBER:

76:22399

TITLE:

Chromophoric substrates. VII. Specificity of

carboxypeptidase B

AUTHOR(S):

Wuensch, Erich; Jaeger, Ernst; Schoensteiner-Altmann,

Gerlinde

CORPORATE SOURCE:

Abt. Peptidchem., Max-Planck-Inst.

Eiweiss-Lederforsch, Munich, Fed. Rep. Ger.

SOURCE:

Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie

(1971), 352(11), 1580-3

CODEN: HSZPAZ; ISSN: 0018-4888

DOCUMENT TYPE:

Journal

LANGUAGE:

German

In liqs. of unknown enzymic compn., chromophoric substrates may apparently be applied reasonably for the detn. of collagenase only if the sequence prevents a degradation from the C-terminus by carboxypeptidase B. attachment of D-arginine to the C-terminal end of the chromophoric substrates only causes the desired effect if the D-arginine residue is preceded by L-proline. Otherwise the C-terminal D-arginine does not appear to be a reliable protection against an enzymic attack by carboxypeptidase B. The investigation of several test substances showed that the rule of specificity needs an unequivocal fixation for this. exopeptidase.

IT35764-47-7 35764-48-8 35764-50-2

RL: BIOL (Biological study)

(reaction with carboxypeptidase B)

ANSWER 55 OF 55 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1972:22397 HCAPLUS

DOCUMENT NUMBER:

76:22397

TITLE:

Chromophoric substrates. VI. Specificity of

collagenase

AUTHOR(S):

Wuensch, Erich; Jaeger, Ernst; Schoensteiner-Altmann,

Gerlinde

CORPORATE SOURCE:

Abt. Peptidchem., Max-Planck-Inst.

Eiweiss-Lederforsch., Munich, Fed. Rep. Ger.

SOURCE:

Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie

(1971), 352(11), 1568-79 CODEN: HSZPAZ; ISSN: 0018-4888

DOCUMENT TYPE:

Journal

LANGUAGE:

German

According to previous investigations, the required specificity for the enzyme collagenase was considered to be already given by the sequence -Pro-R-Gly-Pro- in the substrate; the results found earlier during the study of the chromophoric substrates proved that (7-isopropyl-1methylazulen-4-yl)acetyl-L-propyl-L-leucyl-glycyl-L- prolyl-D-argine, but not the corresponding -L-arginine deriv. seemed to contrast with this rule of specificity. By changes in the collagenase specific sequence as well as in the neighboring substituents of this sequence, it became obvious that not only the sequence -Pro-R-Gly-Pro-, but also the pair of substituents attached to this sequence, and finally, the total conformation of the substrate, is responsible for the enzymic hydrolysis. In the case of an unfavorable conformation of the substrate cleavages are obsd. which make the rule of specificity known so far questionable.

IΤ 35752-56-8 35764-48-8

RL: BIOL (Biological study)

(collagenase response to)

ΙT 35752-63-7P 35752-64-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

ΤТ 35764-47-7

RL: BIOL (Biological study)

(reaction with collagenase)

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FILE 'REGISTRY' ENTERED AT 15:45:24 ON 19 MAR 2003

L1 12850 S LGPA/SQSP

L2 409787 S SQL=<10

L3 76 S L1 AND L2

FILE 'HCAPLUS' ENTERED AT 15:46:56 ON 19 MAR 2003 L4 55 S L3

FILE 'HCAPLUS' ENTERED AT 15:50:01 ON 19 MAR 2003

FILE 'REGISTRY' ENTERED AT 15:50:34 ON 19 MAR 2003

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L5 76 L1 AND L2

=> d rn cn lc nte sql kwic can tot 15

L5 ANSWER 1 OF 76 REGISTRY COPYRIGHT 2003 ACS

RN 481198-27-0 REGISTRY

CN GenBank AAB20998 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAB20998 (Translated from: GenBank S76125)

SOL 5

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SEQ 1 LGPAG

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HITS AT: 1-4

L5 ANSWER 2 OF 76 REGISTRY COPYRIGHT 2003 ACS

RN 481129-49-1 REGISTRY

CN GenBank AAA66353 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAA66353 (Translated from: GenBank M20922)

SQL 8

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1 MTPLGPAS
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HITS AT:
           4 - 7
L5
     ANSWER 3 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
     477562-80-4 REGISTRY
     L-Leucine, L-lysyl-L-leucylglycyl-L-prolyl-L-alanyl-L-prolyl-L-lysyl-L-
     threonyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
     13: PN: WOO2094981 SEQID: 199 claimed sequence
CN
     STN Files: CA, CAPLUS, TOXCENTER
LC
SQL
    9
SQL
    9
SEO
         1 KLGPAPKTL
HITS AT:
           2 - 5
REFERENCE
            1: 138:13498
L5
     ANSWER 4 OF 76 REGISTRY COPYRIGHT 2003 ACS
     473790-15-7 REGISTRY
RN
CN
     L-Arginine, L-glutaminyl-L-leucylglycyl-L-prolyl-L-alanyl-L-
     glutaminylglycyl-L-.alpha.-aspartyl-L-.alpha.-glutamyl- (9CI)
                                                                     (CA INDEX
     NAME)
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LC
                  CA, CAPLUS, TOXCENTER
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           2-5
HITS AT:
REFERENCE
            1:
                137:380979
REFERENCE
            2:
                137:380977
            3: 137:321378
REFERENCE
     ANSWER 5 OF 76 REGISTRY COPYRIGHT 2003 ACS
     473790-14-6 REGISTRY
RN
     L-Glutamine, L-glutaminyl-L-leucyl-L-.alpha.-glutamyl-L-tryptophyl-L-
CN
     glutaminyl-L-leucylglycyl-L-prolyl-L-alanyl- (9CI) (CA INDEX NAME)
    STN Files: CA, CAPLUS, TOXCENTER
LC
SQL
    10
SQL
    10
SEO
         1 QLEWQLGPAQ
HITS AT:
           6-9
REFERENCE
            1: 137:321378
    ANSWER 6 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
     473789-49-0 REGISTRY
    L-Arginine, L-glutaminyl-L-leucylglycyl-L-prolyl-L-alanyl-L-arginylglycyl-
CN
    L-.alpha.-aspartyl-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)
    STN Files: CA, CAPLUS, TOXCENTER
LC
```

```
SQL 10
SQL 10
```

SEQ 1 QLGPARGDER

HITS AT: 2 - 5

REFERENCE 1: 137:380979

REFERENCE 2: 137:380977

REFERENCE 3: 137:321378

L5ANSWER 7 OF 76 REGISTRY COPYRIGHT 2003 ACS

473789-00-3 REGISTRY

CN L-Arginine, L-glutaminyl-L-leucyl-L-.alpha.-glutamyl-L-tryptophyl-Lglutaminyl-L-leucylglycyl-L-prolyl-L-alanyl- (9CI) (CA INDEX NAME)

LC STN Files: CA, CAPLUS, TOXCENTER

SOL 10 10 SQL

SEO 1 QLEWQLGPAR

HITS AT: 6-9

REFERENCE 137:380979 1:

REFERENCE 2: 137:380977

REFERENCE 3: 137:321378

ANSWER 8 OF 76 REGISTRY COPYRIGHT 2003 ACS L5

473327-84-3 REGISTRY RN

CN L-Alanine, L-glutaminyl-L-leucyl-L-.alpha.-glutamyl-L-tryptophyl-Lglutaminyl-L-leucylglycyl-L-prolyl- (9CI) (CA INDEX NAME)

STN Files: CA, CAPLUS, TOXCENTER LC

SQL

SQL 9

SEQ 1 QLEWQLGPA

HITS AT: 6-9

REFERENCE 1: 137:334071

ANSWER 9 OF 76 REGISTRY COPYRIGHT 2003 ACS

472959-53-8 REGISTRY

L-Lysine, L-threonyl-L-isoleucyl-L-leucylglycyl-L-prolyl-L-alanyl-Lglutaminyl-L-asparaginyl-L-valyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

83: PN: WOO2080649 SEQID: 83 unclaimed sequence CN

LC STN Files: CA, CAPLUS

SQL 10

SQL 10

SEQ 1 TILGPAQNVK

3-6 HITS AT:

```
REFERENCE
                            1: 137:305694
           ANSWER 10 OF 76 REGISTRY COPYRIGHT 2003 ACS 432542-27-3 REGISTRY
RN
            Poly(oxy-1,2-ethanediyl), .alpha.-(1-oxo-2-propenyl)-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.omega.-[(2,5-dioxo-1-propenyl)]-.oxo-[(2,5-dioxo-1-propenyl)]-.oxo-[(2,5-dioxo-1-propenyl)]-.
CN
            pyrrolidinyl)oxy]-, polymer with glycylglycyl-L-leucylglycyl-L-prolyl-L-
            alanylglycylglycyl-L-lysine, block (9CI) (CA INDEX NAME)
LC
            STN Files: CA, CAPLUS
NTE homopolymer
           modified (modifications unspecified)
----- location ----- description
  type
modification -

    undetermined modification

SOL 9
SQL 9
SEQ
                     1 GGLGPAGGK
                              ====
HITS AT:
                          3-6
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
            432542-27-3 REGISTRY
                     1 GGLGPAGGK
SEO
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SEO
                     1 GGLGPAGGK
                              ====
HITS AT:
                          3 - 6
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                        1: 137:10877
L5
           ANSWER 11 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
           432542-26-2 REGISTRY
           L-Lysine, glycylglycyl-L-leucylglycyl-L-prolyl-L-alanylglycylglycyl- (9CI)
CN
            (CA INDEX NAME)
LC
           STN Files: CA, CAPLUS
SOL
SOL
           9
SEO
                     1 GGLGPAGGK
                              ====
HITS AT:
                          3-6
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                           1: 138:126898
           ANSWER 12 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
           400856-16-8 REGISTRY
RN
           Glycine, L-seryl-L-prolyl-L-leucylglycyl-L-prolyl-L-alanylglycyl-L-leucyl-
CN
            (9CI) (CA INDEX NAME)
```

```
LC
     STN Files:
                  CA, CAPLUS, TOXCENTER
SQL
SQL
     9
SEQ
         1 SPLGPAGLG
             ====
           3-6
HITS AT:
          1: 136:211958
REFERENCE
     ANSWER 13 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
     400855-54-1 REGISTRY
CN
     L-Leucine, L-seryl-L-seryl-L-prolyl-L-leucylglycyl-L-prolyl-L-alanylglycyl-
      (9CI) (CA INDEX NAME)
LC
     STN Files: CA, CAPLUS, TOXCENTER
SQL
    9
SQL
     9
SEQ
         1 SSPLGPAGL
              ====
HITS AT:
           4-7
REFERENCE
          1: 136:211958
L_5
     ANSWER 14 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
     400855-45-0 REGISTRY
CN
     L-Alanine, L-seryl-L-prolyl-L-leucylglycyl-L-prolyl-L-alanylglycyl-L-
     leucylglycyl- (9CI) (CA INDEX NAME)
     STN Files: CA, CAPLUS, TOXCENTER
LC
SQL
    10
SQL
     10
SEQ
         1 SPLGPAGLGA
             ====
HITS AT:
           3-6
REFERENCE
          1: 136:211958
     ANSWER 15 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
     400853-95-4 REGISTRY
RN
     L-Leucine, glycyl-L-seryl-L-seryl-L-prolyl-L-leucylglycyl-L-prolyl-L-
CN
     alanylglycyl- (9CI) (CA INDEX NAME)
LC
     STN Files: CA, CAPLUS, TOXCENTER
SOL
    10
SOL
    10
SEQ
         1 GSSPLGPAGL
               ====
HITS AT:
           5-8
REFERENCE
          1: 136:211958
    ANSWER 16 OF 76 REGISTRY COPYRIGHT 2003 ACS
1.5
     400853-70-5 REGISTRY
RN
     L-Alanine, L-prolyl-L-leucylglycyl-L-prolyl-L-alanylglycyl-L-leucylglycyl-
CN
     (9CI) (CA INDEX NAME)
                 CA, CAPLUS, TOXCENTER
LC
    STN Files:
SQL
    9
SOL
     9
```

SEO 1 PLGPAGLGA HITS AT: 2-5 REFERENCE 1: 136:211958 L5 ANSWER 17 OF 76 REGISTRY COPYRIGHT 2003 ACS 400853-42-1 REGISTRY RN Glycine, glycyl-L-seryl-L-seryl-L-prolyl-L-leucylglycyl-L-prolyl-L-alanyl-CN (9CI) (CA INDEX NAME) LC STN Files: CA, CAPLUS, TOXCENTER SQL 9 SQL SEQ 1 GSSPLGPAG HITS AT: 5-8 REFERENCE 1: 136:211958 ANSWER 18 OF 76 REGISTRY COPYRIGHT 2003 ACS L_5 390749-36-7 REGISTRY RN $\hbox{L-Valine, L-leucyl-L-leucylglycyl-L-prolyl-L-alanylglycyl-L-histidyl-L-prolyl-L-alanylglycyl-L-histidyl-L-prol$ alanyl- (9CI) (CA INDEX NAME) OTHER NAMES: 131: PN: US20020007173 SEQID: 165 unclaimed sequence CN STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC SQL SQL 9 SEQ 1 LLGPAGHAV ==== HITS AT: 2-5 REFERENCE 1: 136:117371 ANSWER 19 OF 76 REGISTRY COPYRIGHT 2003 ACS L5RN389064-17-9 REGISTRY ${\tt Cyclo}\,({\tt L-alanyl-L-phenylalanyl-L-tryptophyl-L-.alpha.-aspartyl-L-prolyl-L-constant})$ leucylglycyl-L-prolyl) (9CI) (CA INDEX NAME) OTHER NAMES: Brachystemin B CN STN Files: CA, CAPLUS LCNTE cyclic SQL 8 SQL 8 SEQ 1 AFWDPLGP == === HITS AT: 1, 6-8 REFERENCE 1: 136:99152 L5ANSWER 20 OF 76 REGISTRY COPYRIGHT 2003 ACS RN352635-41-7 REGISTRY L-Glutamic acid, L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-Lthreonyl-L-leucyl- (9CI) (CA INDEX NAME) OTHER NAMES:

```
202: PN: WO0155177 SEQID: 1202 unclaimed sequence
 CN
     STN Files: CA, CAPLUS, TOXCENTER
 LC
 SQL
 SQL
     9
 SEQ
          1 ALGPAATLE
HITS AT:
            2 - 5
REFERENCE 1: 135:151623
     ANSWER 21 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
     352628-06-9 REGISTRY
     L-Leucine, L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-L-threonyl-L-
CN
     leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
     78: PN: WO0155177 SEQID: 377 unclaimed sequence
CN
LC
     STN Files: CA, CAPLUS, TOXCENTER
SQL
SQL
     9
SEO
         1 ALGPAATLL
            ====
HITS AT:
           2-5
REFERENCE 1: 135:151623
     ANSWER 22 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
     352628-05-8 REGISTRY
     L-Isoleucine, L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-L-
     threonyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
     77: PN: WO0155177 SEQID: 376 unclaimed sequence
LC
     STN Files: CA, CAPLUS, TOXCENTER
SQL
SQL
    9
·SEQ
         1 ALGPAATLI
            ====
HITS AT:
           2-5
REFERENCE
          1: 135:151623
L_5
     ANSWER 23 OF 76 REGISTRY COPYRIGHT 2003 ACS
     352628-04-7 REGISTRY
     L-Alanine, L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-L-threonyl-L-
     leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
     76: PN: WO0155177 SEQID: 375 unclaimed sequence
CN
LC
     STN Files: CA, CAPLUS, TOXCENTER
SQL
    9
SQL
    9
SEO
         1 ALGPAATLA
           ====
HITS AT:
           2-5
REFERENCE 1: 135:151623
```

```
L5
               ANSWER 24 OF 76 REGISTRY COPYRIGHT 2003 ACS
               352627-73-7 REGISTRY
  RN
  CN
               L-Valine, L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-L-threonyl-
                (9CI) (CA INDEX NAME)
  OTHER NAMES:
               45: PN: WO0155177 SEQID: 344 claimed sequence
               STN Files: CA, CAPLUS, TOXCENTER
  LC
  SQL
              8
  SQL
               8
  SEO
                         1 ALGPAATV
  HITS AT:
                               2-5
  REFERENCE
                                1: 135:151623
               ANSWER 25 OF 76 REGISTRY COPYRIGHT 2003 ACS
  RN
               352627-08-8 REGISTRY
              \hbox{L-Valine, $L$-alanyl-$L$-leucylglycyl-$L$-prolyl-$L$-alanyl-$L$-alanyl-$L$-threonyl-$L$-alanyl-$L$-browner and $L$-browner and $L$-browner
  CN
               leucyl- (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN
              277: PN: WO0155177 SEQID: 277 claimed sequence
 LC
              STN Files: CA, CAPLUS, TOXCENTER
 SQL
 SQL
              9
 SEO
                        1 ALGPAATLV
                                ====
 HITS AT:
                              2-5
 REFERENCE
                               1: 135:151623
              ANSWER 26 OF 76 REGISTRY COPYRIGHT 2003 ACS
 L5
              340238-34-8 REGISTRY
 RN
             L-Leucine, L-leucyl-L-lysyl-L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-
 CN
              alanyl-L-threonyl- (9CI) (CA INDEX NAME)
 LC
             STN Files: CA, CAPLUS, TOXCENTER
 SOL
             10
 SOL
             10
 SEO
                       1 LKALGPAATL
                             4-7
HITS AT:
REFERENCE
                              1: 134:365695
L5
             ANSWER 27 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
             334754-07-3 REGISTRY
             L-Glutamic acid, L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-L-
CN
             threonyl-L-leucyl-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)
LC
             STN Files:
                                              CA, CAPLUS, TOXCENTER
SQL
            10
SQL
SEQ
                       1 ALGPAATLEE
                              =====
HITS AT:
                            2-5
REFERENCE
                              1: 134:309684
```

```
1.5
      ANSWER 28 OF 76 REGISTRY COPYRIGHT 2003 ACS
 RN
      334732-91-1 REGISTRY
     L-Threonine, L-isoleucyl-L-leucyl-L-lysyl-L-alanyl-L-leucylglycyl-L-prolyl-
      L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)
 LC
      STN Files: CA, CAPLUS, TOXCENTER
 SOL
 SQL
     10
 SEO
          1 ILKALGPAAT
HITS AT:
REFERENCE 1: 134:309684
     ANSWER 29 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
     334732-89-7 REGISTRY
     L-Alanine, L-threonyl-L-isoleucyl-L-leucyl-L-lysyl-L-alanyl-L-leucylglycyl-
     L-prolyl-L-alanyl- (9CI) (CA INDEX NAME) STN Files: CA, CAPLUS, TOXCENTER
LC
SQL
     10
SQL
     10
SEO
         1 TILKALGPAA
HITS AT:
           6-9
REFERENCE
            1: 134:365695
REFERENCE
            2: 134:309684
     ANSWER 30 OF 76 REGISTRY COPYRIGHT 2003 ACS
     334731-87-2 REGISTRY
     L-Leucine, L-lysyl-L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-L-
     threonyl- (9CI) (CA INDEX NAME)
LC
     STN Files: CA, CAPLUS, TOXCENTER
SOL
SOL
     9
SEQ
         1 KALGPAATL
             ====
HITS AT:
           3-6
REFERENCE
          1: 134:365695
REFERENCE
            2: 134:309684
L5
     ANSWER 31 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
     334731-85-0 REGISTRY
CN
     L-Alanine, L-isoleucyl-L-leucyl-L-lysyl-L-alanyl-L-leucylglycyl-L-prolyl-L-
     alanyl- (9CI) (CA INDEX NAME)
LC
     STN Files: CA, CAPLUS, TOXCENTER
SQL
     9
SQL
SEQ
         1 ILKALGPAA
HITS AT:
           5-8
```

REFERENCE 1: 134:365695 REFERENCE 2: 134:309684 ANSWER 32 OF 76 REGISTRY COPYRIGHT 2003 ACS RN 334731-84-9 REGISTRY L-Alanine, L-threonyl-L-isoleucyl-L-leucyl-L-lysyl-L-alanyl-L-leucylglycyl-CN L-prolyl- (9CI) (CA INDEX NAME) STN Files: CA, CAPLUS, TOXCENTER LCSQL 9 SQL SEQ 1 TILKALGPA HITS AT: 6-9 REFERENCE 1: 134:365695 2: 134:309684 REFERENCE ANSWER 33 OF 76 REGISTRY COPYRIGHT 2003 ACS 334730-91-5 REGISTRY RN L-Leucine, L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-L-threonyl-CN (9CI) (CA INDEX NAME) OTHER NAMES: 157: PN: WO0155177 SEQID: 157 claimed sequence LC STN Files: CA, CAPLUS, TOXCENTER SQL 8 SQL 8 SEO 1 ALGPAATL ==== HITS AT: 2-5 REFERENCE 1: 135:151623 REFERENCE 2: 134:309684 L5ANSWER 34 OF 76 REGISTRY COPYRIGHT 2003 ACS RN 334730-90-4 REGISTRY CN L-Threonine, L-lysyl-L-alanyl-L-leucylglycyl-L-prolyl-L-alanyl-L-alanyl-(9CI) (CA INDEX NAME) STN Files: LCCA, CAPLUS, TOXCENTER SQL 8 SQL 8 1 KALGPAAT SEQ ==== HITS AT: 3-6 REFERENCE 1: 134:309684 L5ANSWER 35 OF 76 REGISTRY COPYRIGHT 2003 ACS RN 334730-89-1 REGISTRY CN L-Alanine, L-isoleucyl-L-leucyl-L-lysyl-L-alanyl-L-leucylqlycyl-L-prolyl-(9CI) (CA INDEX NAME) LCSTN Files: CA, CAPLUS, TOXCENTER SQL 8 SQL 8

```
SEO
          1 ILKALGPA
 HITS AT:
            5-8
 REFERENCE 1: 134:365695
 REFERENCE
            2: 134:309684
     ANSWER 36 OF 76 REGISTRY COPYRIGHT 2003 ACS
      321308-73-0 REGISTRY
 RN
     L-Leucine, L-prolyl-L-leucylglycyl-L-prolyl-L-alanyl-L-seryl-L-seryl-
 CN
      (9CI) (CA INDEX NAME)
 LC
     STN Files: CA, CAPLUS, TOXCENTER
 SQL 8
 SQL
     8
SEO
         1 PLGPASSL
            ====
HITS AT:
           2-5
REFERENCE 1: 134:114851
     ANSWER 37 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
     304851-60-3 REGISTRY
CN
     L-Alaninamide, L-leucylglycyl-L-prolyl-N-(2-aminoethyl)- (9CI) (CA INDEX
LC.
     STN Files: CA, CAPLUS, TOXCENTER
NTE modified (modifications unspecified)
SQL
SOL 4
SEO
         1 LGPA
           ====
HITS AT:
           1-4
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 133:355232
     ANSWER 38 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
     258332-94-4 REGISTRY
     D-Alaninamide, N-acetyl-3-(2-naphthalenyl)-D-alanyl-4-chloro-D-
CN
     phenylalanyl-3-(3-pyridinyl)-D-alanyl-L-seryl-L-tyrosyl-N5-(aminocarbonyl)-
     D-ornithyl-L-leucyl-N-[3-[(aminoiminomethyl)amino]propyl]glycyl-L-prolyl-
     (9CI) (CA INDEX NAME)
LC
     STN Files: CA, CAPLUS
NTE modified
                ----- location ----- description
terminal mod. Ala-1
                                          N-acetyl
terminal mod. Ala-10 uncommon Cit-6
                                _
                                         C-terminal amide
                                _
modification Ala-1 modification Phe-2
                                _
                                         2-naphthalenyl<2-Naph>
                                -
                                         chloro<Cl>
modification Ala-3
                                -
                                         3-pyridinyl<3Py>
modification Gly-8
                                      undetermined modification
```

ANSWER 42 OF 76 REGISTRY COPYRIGHT 2003 ACS L5. RN 171105-39-8 REGISTRY $L-Valine, \ N-[N-[N-[N-[N-[N-[N-[N-[N-[N-L-leucyl-L-leucyl)glycyl]-L-prolyl]-L-prolyl]-L-prolyl] - L-prolyl] -$ CN alanyl]-L-.alpha.-aspartyl]glycyl]-L-methionyl]- (9CI) (CA INDEX NAME) LCSTN Files: CA, CAPLUS, TOXCENTER, USPATFULL SQL 9 SQL 9

```
SEQ
       1 LLGPADGMV
HITS AT:
         2-5
REFERENCE 1: 124:7073
L5
    ANSWER 43 OF 76 REGISTRY COPYRIGHT 2003 ACS
    171105-38-7 REGISTRY
RN
    CN
    L-prolyl]-L-alanyl]-L-alpha.-aspartyl]qlycyl]-L-methionyl]- (9CI) (CA
    INDEX NAME)
LC
               CA, CAPLUS, TOXCENTER, USPATFULL
SOL 10
SQL 10
SEQ
       1 ILLGPADGMV
          ====
HITS AT:
         3-6
REFERENCE 1: 124:7073
    ANSWER 44 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
    159348-01-3 REGISTRY
CN
    1-75-Colony-stimulating factor (human clone pBRV-2 reduced),
    16-L-arginine-17-L-serine-23-L-arginine-34-L-arginine-40-L-arginine-75-L-
    lysine-76-(N-hydroxy-L-homocysteinamide)-, (76.fwdarw.1')-thioether with
    N-(mercaptoacetyl)-L-seryl-L-leucyl-L-leucine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    1-75-Colony-stimulating factor (human clone pBRV-2 reduced),
    16-L-arginine-17-L-serine-23-L-arginine-34-L-arginine-40-L-arginine-75-L-
    lysine-76-(N-hydroxy-L-homocysteinamide)-, (76.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)-L-seryl-L-leucyl-L-leucine
LC
    STN Files:
              CA, CAPLUS
NTE multichain
    modified (modifications unspecified)
   ______
type ----- location ----- description
bridge Hcy-76 - Ser-1' covalent bridge uncommon Hcy-76 -
SQL 79,76,3
SQL 79,76,3
       1 TPLGPASSLP QSFLLRSLEQ VRRIQGDGAA LQERLCATYR LCHPEELVLL
HITS AT:
         3 - 6
REFERENCE 1: 122:10665
    ANSWER 45 OF 76 REGISTRY COPYRIGHT 2003 ACS
L.5
    151264-92-5 REGISTRY
RN
    CN
    prolyl]-L-alanyl]-L-.alpha.-glutamyl]-L-leucyl]glycyl]-L-prolyl]-L-alanyl]-
    L-.alpha.-glutamyl]-L-leucyl]-, 1-(2-oxo-2-phenylethyl)
    5,5'-bis(phenylmethyl) ester (9CI) (CA INDEX NAME)
             CA, CAPLUS
LĊ
    STN Files:
```

```
NTE modified
 ___________
        ----- location ----- description
 ______
modification Pro-1 - (1,1-dimethylethoxy) carbonyl<Boc> modification Glu-3 - phenylmethyl<Bzl> modification Glu-8 - phenylmethyl<Bzl>
SQL 10
SQL 10
SEO
         1 PAELGPAELG
HITS AT:
          4 - 7
REFERENCE 1: 120:31209
REFERENCE 2: 119:250478
T.5
     ANSWER 46 OF 76 REGISTRY COPYRIGHT 2003 ACS
     148825-03-0 REGISTRY
RN
CN
     L-Alanine, N-[1-[N-[N-[N-(N-L-arginyl-L-methionyl)-L-phenylalanyl]-L-
     leucyl]glycyl]-L-prolyl]- (9CI) (CA INDEX NAME)
LC
     STN Files: CA, CAPLUS
SOL 7
SQL
    7
SEO
        1 RMFLGPA
HITS AT:
          4 - 7
REFERENCE 1: 119:73066
T.5
    ANSWER 47 OF 76 REGISTRY COPYRIGHT 2003 ACS
    147097-70-9 REGISTRY
RN
    270-373-Protein (human immunodeficiency virus 1 gene gag),
CN
    N-[[[4-[[[1-[[[1-(methoxycarbonyl)nonyl]amino]carbonyl]nonyl]amino]carbony
     1]-9H-fluoren-9-yl]methoxy]carbonyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    270-373-Protein (human immunodeficiency provirus 1 gene gag),
    N-[[[4-[[[1-[[[1-(methoxycarbonyl)nonyl]amino]carbonyl]nonyl]amino]carbony
    1]-9H-fluoren-9-yl]methoxy]carbonyl]-
                CA, CAPLUS
    STN Files:
NTE multichain
    modified (modifications unspecified)
 type ----- location ----- description
bridge Leu-1 - Aaa-1' covalent bridge uncommon Aaa-1' - - - - - -
SQL 106,104,2
SQL 106,104,2
SEQ
       51 TLLVQNANPD AKTILKALGP AATLEEMMTA AQGVGGPGHK ARVLAEAMSO
HITS AT: 68-71
```

```
REFERENCE
          1: 118:192247
L5
    ANSWER 48 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
    146762-91-6 REGISTRY
    L-Arginine, N2-[N-[N-[1-(N-L-leucylglycyl)-L-prolyl]-L-alanyl]glycyl]-
CN
    (9CI) (CA INDEX NAME)
LC
    STN Files: CA, CAPLUS
SQL
SQL
    6
SEQ
       1 LGPAGR
         ====
HITS AT:
         1 - 4
REFERENCE 1: 118:169618
    ANSWER 49 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
    143433-68-5 REGISTRY
   L-Prolinamide, L-threonyl-L-prolyl-L-leucylglycyl-L-prolyl-L-alanyl-L-
CN
    seryl-L-seryl-L-leucyl- (9CI) (CA INDEX NAME)
LC
    STN Files:
             CA, CAPLUS
NTE modified
            ----- location ----- description
terminal mod. Pro-10 - C-terminal amide
SQL 10
SEO
       1 TPLGPASSLP
          ====
HITS AT:
        3-6
REFERENCE 1: 117:143655
    ANSWER 50 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
    133083-35-9 REGISTRY
    D-Lysine, 1-(2,4-dinitrophenyl)-L-prolyl-L-leucylglycyl-L-prolyl-3-(7-
    methoxy-2-oxo-2H-1-benzopyran-4-yl)alanyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    CN
    L-prolyl]-3-(7-methoxy-2-oxo-2H-1-benzopyran-4-yl)-DL-alanyl]-
    STN Files: CA, CAPLUS
LC
NTE modified (modifications unspecified)
       ----- location ----- description
Ala-5 -
Lys-6 -
stereo
                            DL
stereo
                                 D
SQL 6
SQL 6
SEQ
       1 PLGPAK
HITS AT:
        2-5
```

```
REFERENCE 1: 114:159650
  L5
             ANSWER 51 OF 76 REGISTRY COPYRIGHT 2003 ACS
  RN
             124859-55-8 REGISTRY
  CN
             L-Alanine, L-lysyl-L-threonyl-L-isoleucyl-L-leucyl-L-lysyl-L-alanyl-L-
             leucylglycyl-L-prolyl- (9CI) (CA INDEX NAME)
  OTHER CA INDEX NAMES:
              L-Alanine, \ N-[1-[N-[N-[N-[N-[N-[N-(N-L-lysyl-L-threonyl)-L-isoleucyl]-L-isoleucyl]] - L-isoleucyl] - L-iso
             leucyl]-L-lysyl]-L-alanyl]-L-leucyl]glycyl]-L-prolyl]-
  LC
             STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
  SOL
  SOL
            10
  SEQ
                      1 KTILKALGPA
 HITS AT:
                           7-10
 REFERENCE
                             1: 134:365695
                             2:
 REFERENCE
                                     134:309684
 REFERENCE
                             3: 115:112651
 REFERENCE
                             4: 112:62598
            ANSWER 52 OF 76 REGISTRY COPYRIGHT 2003 ACS
 L5
 RN
            114454-63-6 REGISTRY
            CN
            L-asparaginyl]-L-lysyl]- (9CI) (CA INDEX NAME)
 LC
            STN Files: CA, CAPLUS
 SOL
 SOL
            8
 SEO
                     1 LGPAGNKV
                          ====
HITS AT:
                          1 - 4
REFERENCE
                        1: 124:48923
REFERENCE
                        2: 108:200828
L5
            ANSWER 53 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
           111110-30-6 REGISTRY
           L-Alanine, N-[1-[N-(N-(2-furanylcarbonyl)-L-leucyl]glycyl]-L-prolyl]-
CN
            (9CI) (CA INDEX NAME)
           STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
  type ----- location ----- description
modification Leu-1 - undetermined modification
SQL 4
SQL
         4
SEQ
                     1 LGPA
                         ====
HITS AT:
                         1 - 4
```

```
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
        1: 107:191131
L5
   ANSWER 54 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
   111110-12-4 REGISTRY
  L-Alanine, N-[1-[N-(N-benzoyl-L-leucyl)glycyl]-L-prolyl]-, methyl ester
CN
   (9CI) (CA INDEX NAME)
LC
  STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
------
       ----- location ----- description
 type
-----
modification Leu-1 - benzoyl<Bz>
SOL 4
SQL 4
SEQ
      1 LGPA
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEOLINK**
REFERENCE 1: 107:191131
   ANSWER 55 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
   111110-11-3 REGISTRY
RN
CN
   L-Alanine, N-[1-[N-(N-benzoyl-L-leucyl)glycyl]-L-prolyl]- (9CI) (CA INDEX
   NAME)
LC STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
------
type ----- location ----- description
modification Leu-1 - benzoyl<Bz>
SQL 4
SQL 4
      1 LGPA
SEQ
        ====
HITS AT:
        1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 107:191131
   ANSWER 56 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
   96596-40-6 REGISTRY
  L-Alanine, N-[1-[N-[N-[3-(2-furanyl)-1-oxo-2-propenyl]-L-leucyl]glycyl]-L-
   prolyl]-, methyl ester (9CI) (CA INDEX NAME)
   STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
-------
           ----- location ----- description
modification Leu-1 - undetermined modification
```

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 109:2885

REFERENCE 2: 103:192081

REFERENCE 3: 102:217337

```
L5
    ANSWER 59 OF 76 REGISTRY COPYRIGHT 2003 ACS
    96595-84-5 REGISTRY
ŔŊ
    CN
    prolyl] - (9CI) (CA INDEX NAME)
STN Files: CA, CAPLUS
LC
NTE modified (modifications unspecified)
----- location -----
type
                                     description
modification Leu-1 - 1-oxo-3-phenyl-2-propenyl
SQL 4
SQL 4
SEQ
       1 LGPA
        ====
HITS AT:
        1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEOLINK**
REFERENCE
         1: 109:2885
REFERENCE
         2: 103:192081
REFERENCE
        3: 102:217337
   ANSWER 60 OF 76 REGISTRY COPYRIGHT 2003 ACS
1.5
RN
   96194-15-9 REGISTRY
CN
   L-Alanine, N-[1-[N-[N-[4-(2-furanyl)-1,4-dioxo-2-butenyl]-L-leucyl]qlycyl]-
   L-prolyl] - (9CI) (CA INDEX NAME)
LC
   STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
       ----- location ----- description
modification Leu-1 - undetermined modification
SOL 4
SOL 4
SEQ
       1 LGPA
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
        1: 103:18900
   ANSWER 61 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
   86563-79-3 REGISTRY
   L-Alanine, N-[1-(N-L-leucylglycyl)-L-prolyl]-, mono(trifluoroacetate)
CN
    (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Acetic acid, trifluoro-, compd. with N-[1-(N-L-leucylglycyl)-L-prolyl]-L-
   alanine (1:1)
LC
   STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
______
            ----- location ----- description
type
```

```
    undetermined modification

modification -
SQL 4
SQL 4
SEQ
         1 LGPA
          ====
HITS AT:
          1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
   86563-79-3 REGISTRY
SEQ
        1 LGPA
HITS AT:
           1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SEQ
        1 LGPA
HITS AT:
          1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 99:118322
    ANSWER 62 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
     86563-78-2 REGISTRY
RN
    L-Alanine, L-leucylglycyl-L-prolyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    L-Alanine, N-[1-(N-L-leucylglycyl)-L-prolyl]-
OTHER NAMES:
CN
     1: PN: WO0064486 PAGE: 11 unclaimed sequence
LC
     STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
SQL
SQL 4
SEQ
        1 LGPA
HITS AT:
          1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 133:355232
REFERENCE
          2: 126:321066
    ANSWER 63 OF 76 REGISTRY COPYRIGHT 2003 ACS
    86563-77-1 REGISTRY
RN
    L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-L-leucylglycyl-L-prolyl- (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
    L-Alanine, N-[1-[N-[N-[(1,1-dimethylethoxy)carbonyl]-L-leucyl]glycyl]-L-
    prolyl]-
               CA, CAPLUS, TOXCENTER
LC
    STN Files:
NTE modified (modifications unspecified)
                ----- location -----
type
                                              description
```

```
modification Leu-1 - (1,1-dimethylethoxy) carbonyl<Boc>
SQL 4
SQL 4
SEO
       1 LGPA
        1 - 4
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
        1: 133:355232
REFERENCE 2: 99:118322
L5
   ANSWER 64 OF 76 REGISTRY COPYRIGHT 2003 ACS
    83387-70-6 REGISTRY
RN
CN
   L-Alaninamide, N-acetylglycyl-L-prolyl-L-alanylglycyl-L-prolyl-L-
    leucylglycyl-L-prolyl-N-methyl- (9CI) (CA INDEX NAME)
LC
   STN Files: CA, CAPLUS
NTE modified
            ----- location ----- description
terminal mod. Gly-1 - N-acetyl
____________
SQL 9
SQL 9
SEQ 1 GPAGPLGPA
            ====
HITS AT:
        6-9
REFERENCE 1: 97:177203
   ANSWER 65 OF 76 REGISTRY COPYRIGHT 2003 ACS
   78832-65-2 REGISTRY
RN
   L-Alanine, N-[3-(2-furanyl)-1-oxo-2-propenyl]-L-leucylglycyl-L-prolyl-
   (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
   L-Alanine, N-[1-[N-[N-[3-(2-furanyl)-1-oxo-2-propenyl]-L-leucyl]glycyl]-L-
            CA, CAPLUS, CHEMCATS, CSCHEM, MEDLINE, TOXCENTER
LC
   STN Files:
NTE modified (modifications unspecified)
______
       ----- location -----
_____
modification Leu-1
                                undetermined modification
______
SQL 4
SOL 4
     1 LGPA
SEQ
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
```

```
1: 131:84673
 REFERENCE
 REFERENCE
              122:310033
 REFERENCE
           3:
              121:103061
 REFERENCE
           4:
              117:146002
REFERENCE
           5:
              112:115491
REFERENCE
           6: 109:124938
REFERENCE
           7: 108:218111
REFERENCE
           8: 105:221504
REFERENCE
           9: 103:192081
REFERENCE 10: 102:217337
    ANSWER 66 OF 76 REGISTRY COPYRIGHT 2003 ACS
    55260-05-4 REGISTRY
RN
    L-Alanine, N-[1-(N-L-leucylglycyl)-L-prolyl]-, methyl ester (9CI) (CA
CN
    INDEX NAME)
LC
    STN Files:
              CA, CAPLUS
NTE
    modified (modifications unspecified)
SQL
SQL
SEQ
        1 LGPA
         ====
HITS AT:
         1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 82:156705
L5
    ANSWER 67 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
    55260-04-3 REGISTRY
    L-Alanine, N-[N-[1-[N-[1-[[1-methyl-7-(1-methylethyl)-4-[1-methyl-7-(1-methylethyl]]]]
    azulenyl]acetyl]-L-prolyl]-L-leucyl]glycyl]-L-prolyl]-L-alanyl]-, methyl
    ester (9CI) (CA INDEX NAME)
LC
    STN Files:
               CA, CAPLUS
NTE modified
----- location ----- description
modification Pro-1 - undetermined modification
SQL 6
SQL 6
SEO
       1 PLGPAA
          ====
HITS AT:
         2-5
REFERENCE
          1: 82:156705
```

ANSWER 68 OF 76 REGISTRY COPYRIGHT 2003 ACS

```
55260-03-2 REGISTRY
    L-Alanine, N-[1-[N-[1-methyl-7-(1-methylethyl)-4-azulenyl]acetyl]-L-1-methylethyl
CN
    leucyl]glycyl]-L-prolyl]-, methyl ester (9CI) (CA INDEX NAME)
LC
    STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
_______
            ----- location -----
type
                                    description
______
modification Leu-1
                                undetermined modification
SQL 4
SQL 4
SEQ
       1 LGPA
        ====
HITS AT:
        1 - 4
**RELATED SEQUENCES AVAILABLE WITH SEOLINK**
REFERENCE 1: 82:156705
   ANSWER 69 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
   37058-26-7 REGISTRY
   L-Alanine, N-[1-[N-[N-[1-(N-acetylglycyl)-L-prolyl]-D-leucyl]glycyl]-L-
   prolyl] - (9CI) (CA INDEX NAME)
OTHER NAMES:
   N-Acetylglycyl-L-prolyl-D-leucylglycyl-L-prolyl-L-alanine
CN
LC
   STN Files: CA, CAPLUS
NTE modified
        ----- location ----- description
                   - N-acetyl
terminal mod. Gly-1
______
SQL 6
SQL 6
       1 GPLGPA
SEQ
         ====
HITS AT:
        3-6
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
       1: 77:58236
   ANSWER 70 OF 76 REGISTRY COPYRIGHT 2003 ACS
   35866-17-2 REGISTRY
RN
   L-Alanine, N-[1-[N-[N-[1-[[1-methyl-7-(1-methylethyl)-4-azulenyl]acetyl]-L-
   prolyl]-L-leucyl]glycyl]-L-prolyl]-, methyl ester (9CI) (CA INDEX NAME)
   STN Files:
             CA, CAPLUS
NTE modified (modifications unspecified)
_______
           ----- location -----
                                    description
______
modification Pro-1
                                undetermined modification
SQL 5
SQL 5
```

```
SEO
       1 PLGPA
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEOLINK**
REFERENCE
         1: 82:156705
REFERENCE 2: 76:22421
L5
    ANSWER 71 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
    35764-50-2 REGISTRY
    CN
    prolyl]-L-leucyl]glycyl]-L-prolyl]-L-alanyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
    (4-Phenylazobenzyloxycarbonyl)-L-prolyl-L-leucylglycyl-L-prolyl-L-alanyl-D-
    arginine
LC
    STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
----- location -----
 type
                                       description
[[4-(phenylazo)phenyl]
methoxy]carbonyl<Pz>
modification Pro-1
SQL 6
SQL 6
SEQ
       1 PLGPAR
HITS AT:
         2-5
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
         1: 76:22399
L5
    ANSWER 72 OF 76 REGISTRY COPYRIGHT 2003 ACS
    35764-48-8 REGISTRY
RN
    D-Arginine, N-[N-[N-[N-[N-[1-[(1-methyl-7-(1-methylethyl)-4-(1-methylethyl)-4-(1-methylethyl)]]
CN
    azulenyl]acetyl]-L-prolyl]-L-leucyl]glycyl]-L-prolyl]-L-alanyl]-L-alanyl]-
    (9CI) (CA INDEX NAME)
OTHER NAMES:
    (7-Isopropyl-1-methylazulen-4-yl)acetyl-L-prolyl-L-leucylglycyl-L-prolyl-L-
    alanyl-L-alanyl-D-arginine
    STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
type ----- location ----- description
modification Pro-1 -
                               undetermined modification
SQL 7
SQL 7
       1 PLGPAAR
SEO
         ====
HITS AT:
         2 - 5
```

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

```
REFERENCE
                        1: 76:22399
REFERENCE
                           2: 76:22397
           ANSWER 73 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
           RN
CN
           azulenyl]acetyl]-L-prolyl]-L-leucyl]glycyl]-L-prolyl]-L-alanyl]- (9CI)
            (CA INDEX NAME)
OTHER NAMES:
           (7-Isopropyl-1-methylazulen-4-yl)acetyl-L-prolyl-L-leucylglycyl-L-prolyl-L-
           alanyl-D-arginine
LC
           STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
                                    ----- location -----
  type
                                                                                                       description
 ______
modification Pro-1
                                                                                  undetermined modification
SQL 6
SQL 6
SEO
                   1 PLGPAR
                         ====
HITS AT:
                        2-5
**RELATED SEQUENCES AVAILABLE WITH SEOLINK**
REFERENCE
                          1: 76:22399
REFERENCE
                          2: 76:22397
L5
           ANSWER 74 OF 76 REGISTRY COPYRIGHT 2003 ACS
RN
           35752-64-8 REGISTRY
           2,5-Pyrrolidinedione, 1-[[N-[1-[N-[1-[1-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethyl)-4-methyl-7-(1-methylethylethyl-7-(1-methylethylethyl)-4-methyl-7-(1-methylethylethylethyl-7-(1-methylethylethylethylethyl-7-(1-methylethylethylethyl-7-(1-methylethylethyl
CN
           azulenyl]acetyl]-L-prolyl]-L-leucyl]glycyl]-L-prolyl]-L-alanyl]oxy]- (9CI)
           (CA INDEX NAME)
OTHER CA INDEX NAMES:
           L-Alanine, N-[1-[N-[N-[1-[[1-methyl-7-(1-methylethyl)-4-azulenyl]acetyl]-L-
           prolyl]-L-leucyl]glycyl]-L-prolyl]-, 2,5-pyrrolidinedione deriv.
OTHER NAMES:
CN
           (7-Isopropyl-1-methylazulen-4-yl)acetyl-L-prolyl-L-leucylglycyl-L-prolyl-L-
           alanine N-hydroxysuccinimide ester
LC
           STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
                                  ----- location ----- description
modification Pro-1 -
                                                                                 undetermined modification
SQL 5
SQL 5
SEQ
                   1 PLGPA
                         ====
HITS AT:
                        2-5
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
```

```
1: 76:22397
REFERENCE
    ANSWER 75 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
    35752-63-7 REGISTRY
CN
    L-Alanine, N-[1-[N-[N-[1-[[1-methyl-7-(1-methylethyl)-4-azulenyl]acetyl]-L-[1-methylethyl]
    prolyl]-L-leucyl]glycyl]-L-prolyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
    (7-Isopropyl-1-methylazulen-4-yl)acetyl-L-prolyl-L-leucylglycyl-L-prolyl-L-
    alanine
LC
    STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
               ----- location ----- description
type

    undetermined modification

modification Pro-1
SQL 5
SQL 5
SEQ
        1 PLGPA
           ====
          2-5
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 76:22397
    ANSWER 76 OF 76 REGISTRY COPYRIGHT 2003 ACS
L5
RN
    35752-56-8 REGISTRY
    D-Arginine, N2-[N-[N-[N-[1-[[1-methyl-7-(1-methylethyl)-4-[1-methylethyl]]]]
CN
    azulenyl]acetyl]-L-prolyl]-L-leucyl]glycyl]-L-prolyl]-L-alanyl]-D-alanyl]-
          (CA INDEX NAME)
    (9CI)
OTHER NAMES:
    (7-Isopropyl-1-methylazulen-4-yl)acetyl-L-prolyl-L-leucylglycyl-L-prolyl-L-
CN
    alanyl-D-alanyl-D-arginine
LC
    STN Files: CA, CAPLUS
NTE modified (modifications unspecified)
______
         ----- location ----- description
type
modification Pro-1 -
                                       undetermined modification
SQL 7
SQL 7
        1 PLGPAAR
SEO
           ====
          2-5
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
         1: 76:22397
```

GenCore version 5.1.4 p5 4578 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

March 18, 2003, 09:33:38; Search time 28 Seconds Run on:

(without alignments)

29.435 Million cell updates/sec

Title: US-09-520-856A-1

Perfect score: 21

1 LGPA 4 Sequence:

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

671580 seqs, 206047115 residues Searched:

Total number of hits satisfying chosen parameters: 1224

Minimum DB seq length: 0 Maximum DB seq length: 10

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SPTREMBL 21:*

1: sp_archea:*

2: sp_bacteria:*

3: sp fungi:*

4: sp human:*

5: sp invertebrate:*

6: sp mammal:*

7: sp mhc:*

8: sp_organelle:*

9: sp_phage:*

10: sp plant:*

11: sp rodent:*

12: sp virus:*

13: sp vertebrate:*

14: sp_unclassified:*

15: sp_rvirus:*
16: sp_bacteriap:*

17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result Query

No. Score Match Length DB ID

Description

7	1.0	00 5	1.0	11	060000	262200
1	19	90.5	10	11	Q63389	Q63389 rattus norv
2	17	81.0	9	4	Q9H326	Q9h326 homo sapien
3	15	71.4	10	2	Q8RJF1	Q8rjf1 pseudomonas
4	15	71.4	10	8	Q8SH93	Q8sh93 brookesia p
5	14	66.7	. 7	15	Q07624	Q07624 rous sarcom
6	14	66.7	10	13	Q9PRU9	Q9pru9 sparus aura
7	13	61.9	8	2	Q9X3K1	Q9x3k1 prochloroco
8	13	61.9	8	4	Q16468	Q16468 homo sapien
9	13	61.9	8	5	002032	002032 lytechinus
10	13	61.9	8	6	Q9TRY3	Q9try3 sus sp. ins
11	13	61.9	8	10	Q42507	Q42507 triticum ae
12	13	61.9	9	5	Q9TWV0	Q9twv0 anthopleura
13	13	61.9	9	5	Q9TWD6	Q9twd6 leptinotars
14	13	61.9	9	11	Q8R514	Q8r514 rattus norv
15	13	61.9	10	2	Q9R7J8	Q9r7j8 helicobacte
16	13	61.9	10	4	Q9UNF2	Q9unf2 homo sapien
17	13	61.9	10	4	Q9P2Z9	Q9p2z9 homo sapien
18	13	61.9	10	4	Q9UE86	Q9ue86 homo sapien
19	13	61.9	10	4	Q14096	Q14096 homo sapien
20	13	61.9	10	5	P82222	P82222 bombyx mori
21	13	61.9	10	6	Q9TS42	Q9ts42 sus scrofa
22	13	61.9	10	10	Q99213	Q99213 aegilops sq
23	13	61.9	10	11	Q9QVF0	Q9qvf0 mus sp. pro
24	13	61.9	10	11	Q9QVE9	Q9qve9 mus sp. pro
25	13	61.9	10	12	P90373	P90373 pseudorabie
26	13	61.9	10	13	Q90Y93	Q90y93 gallus gall
27	13	61.9	10	13	Q9TWX9	Q9twx9 eptatretus
28	12	57.1	10	2	Q9APT8	Q9apt8 pseudomonas
29	11	52.4	8	5	P83277	P83277 macrobrachi
30	11	52.4	8	5	P82689	P82689 periplaneta
31	11	52.4	8	11	Q62933	Q62933 rattus norv
32	11	52.4	8	11	Q62528	Q62528 mus spretus
33	11	52.4	8	12	Q83349	Q83349 murine coro
34	11	52.4	8	15	Q85562	Q85562 moloney mur
35	11	52.4	9	2	Q51765	Q51765 pseudomonas
36	11	52.4	9	2	Q99193	Q99193 pseudomonas
37	11	52.4	9	4	Q9H522	Q9h522 homo sapien
38	11	52.4	9	4	Q9UE09	Q9ue09 homo sapien
39	11	52.4	9	6	Q28112	Q28112 bos taurus
40	11	52.4	9	8	P92072	P92072 euhadra her
41	11	52.4	9	8	Q94VI0	Q94vi0 varanus gig
42	11	52.4	9	11	Q924N8	Q924n8 mus musculu
43	11	52.4	9	13	P83056	P83056 bombina var
44	11	52.4	9	16	Q935G1	Q935g1 salmonella
45	11	52.4	10	4	060912	060912 homo sapien

ALIGNMENTS

```
RESULT 1
Q63389

ID Q63389

AC Q63389;

DT 01-NOV-1996 (TrEMBLrel. 01, Created)

DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)

DT 01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
```

```
Ornithine decarboxylase (ODC).
DE
OS
    Rattus norvegicus (Rat).
OC
    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
    Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OC
    NCBI TaxID=10116;
OX
RN
    [1]
RΡ
    SEQUENCE FROM N.A.
RC
     STRAIN=SPRAGUE-DAWLEY; TISSUE=TESTIS;
    MEDLINE=89255378; PubMed=2722815;
RX
    Wen L., Huang J.K., Blackshear P.J.;
RA ·
     "Rat ornithine decarboxylase gene. Nucleotide sequence, potential
RT
RT
    regulatory elements, and comparison to the mouse gene.";
     J. Biol. Chem. 264:9016-9021(1989).
RL
    EMBL; J04791; AAA66163.1; -.
DR
    SEQUENCE 10 AA; 1074 MW; 30F6EE69D415BDC7 CRC64;
SQ
                         90.5%; Score 19; DB 11; Length 10;
 Query Match
 Best Local Similarity
                         75.0%; Pred. No. 5.3e+02;
 Matches
           3; Conservative 1; Mismatches
                                               0; Indels
                                                                0; Gaps
                                                                            0:
       1 LGPA 4
Qу
          : 111
Db
       1 MGPA 4
```

Search completed: March 18, 2003, 09:34:56

Job time : 30 secs

GenCore version 5.1.4 p5 4578 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

March 18, 2003, 09:33:39 ; Search time 10 Seconds Run on:

(without alignments)

16.591 Million cell updates/sec

Title: US-09-520-856A-1

Perfect score: 21

Sequence:

1 LGPA 4

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched:

112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 346

Minimum DB seq length: 0 Maximum DB seq length: 10

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt 40:*

> Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		ક				
Result		Query				
No.	Score	Match	Length	DB	ID	Description
1	17	81.0	8	1	RS7_MYCIT	P33564 mycobacteri
2	17	81.0	9	1	FAR9 ASCSU	P43172 ascaris suu
3	, 14	66.7	9	1	TKL1_LOCMI	P16223 locusta mig
4	14	66.7	10	1	TRP8 LEUMA	P81740 leucophaea
5	13	61.9	7	1	MNP1_LEPDE	P42984 leptinotars
6	13	61.9	8	1	AL15 CARMA	P81818 carcinus ma
7	13	61.9	8	1	AL16_CARMA	P81819 carcinus ma
8	13	61.9	8	1	ALL5_CALVO	P41841 calliphora
9	13	61.9	8	1	ALL8_CARMA	P81811 carcinus ma
10	13	61.9	8	1	ALL9_CARMA	P81812 carcinus ma
11	13	61.9	8	1	FAR7_ASCSU	P43171 ascaris suu
12	13	61.9	8	1	VGLG_HSV2B	P81780 herpes simp
13	13	61.9	10	1	BPP_VIPAS	P31351 vipera aspi
14	13	61.9	10	1	COXO_RAT	P80432 rattus norv
15	13	61.9	10	1	COXO_THUOB	P80982 thunnus obe
16	11	52.4	8	1	LCK1_LEUMA	P21140 leucophaea
17	11	52.4	. 8	1	LCK7 LEUMA	P19989 leucophaea

18	11	52.4	9	1	UPA6_HUMAN	P30092	homo sapien
19	11	52.4	10	1	COXH_ONCMY	P80331	oncorhynchu
20	11	52.4	10	1	COXQ_RABIT	P80336	oryctolagus
21	11	52.4	10	1	COXQ SHEEP	P80337	ovis aries
22	11	52.4	10	1	GON1 CLUPA	P81749	clupea pall
23	11	52.4	10	1	NS1 MYCTU	P81135	mycobacteri
24	11	52.4	10	1	Q20B_COMTE	P80465	comamonas t
25	11	52.4	10	1	TKNC RANCA	P22690	rana catesb
26	11	52.4	10	1	TMOF AEDAE	P19425	aedes aegyp
27	11	52.4	10	1	TRP5 LEUMA	P81737	leucophaea
28	11	52.4	10	1	TRP6_LEUMA	P81738	leucophaea
29	11	52.4	10	1	TRP7_LEUMA	P81739	leucophaea
30	11	52.4	10	1	UPA2 HUMAN	P30088	homo sapien
31	11	52.4	10	1	UPA8 HUMAN	P30094	homo sapien
32	10	47.6	9	1	OXYA SQUAC	P42999	squalus aca
33	10	47.6	9	1	OXYT_RABIT	P32878	oryctolagus
34	10	47.6	9	1	RE42_LITRU	P82075	litoria rub
35	10	47.6	10	1	CU30_LOCMI	P11735	locusta mig
36	10	47.6	10	1	TKL4 LOCMI	P30250	locusta mig
37	10	47.6	10	1	VEG6_BACSU	P80699	bacillus su
38	9	42.9	7	1	BRHP_CONIM	P58803	conus imper
39	9	42.9	9	1	BUK_CLOPA	P81337	clostridium
40	9	42.9	9	1	DSIP RABIT	P01158	oryctolagus
41	9	42.9.	9	1	MGMT BOVIN	P29177	bos taurus
42	9	42.9	9	1	XYLA STRSQ	P19149	streptomyce
43	9	42.9	9	1	YBFR_AZOVI	P25825	azotobacter
44	9	42.9	10	1	GON1 ALLMI	P37041	alligator m
45	9	42.9	10	1	PPCK_FASHE		fasciola he

RESULT 1

```
RS7 MYCIT
ΙD
     RS7 MYCIT
                    STANDARD;
                                   PRT;
                                             8 AA.
     P33564;
АC
     01-FEB-1994 (Rel. 28, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     01-FEB-1994 (Rel. 28, Last annotation update)
DT
DE
     30S ribosomal protein S7 (Fragment).
GN
     RPSG.
OS
     Mycobacterium intracellulare.
OC
     Bacteria; Actinobacteria; Actinobacteria (class); Actinobacteridae;
OC
     Actinomycetales; Corynebacterineae; Mycobacteriaceae; Mycobacterium.
OX
     NCBI TaxID=1767;
RN
     [1]
RP
     SEQUENCE FROM N.A.
RX
    MEDLINE=93197130; PubMed=8451173;
     Nair J., Rouse D.A., Morris S.L.;
RA
RT
     "Nucleotide sequence analysis of the ribosomal S12 gene of
    Mycobacterium intracellulare.";
RT
    Nucleic Acids Res. 21:1039-1039(1993).
RL
CC
     -!- FUNCTION: PROTEIN S7 BINDS SPECIFICALLY TO PART OF THE 3' END OF
CC
         16S RIBOSOMAL RNA (BY SIMILARITY).
CC
     -!- SIMILARITY: BELONGS TO THE S7P FAMILY OF RIBOSOMAL PROTEINS.
CC
```

```
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    ______
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DR
    EMBL; L08171; AAA25376.1; -.
    PIR; S35538; S35538.
DR
DR
    InterPro; IPR000235; Ribosomal S7.
    PROSITE; PS00052; RIBOSOMAL S7; PARTIAL.
DR
KW
    Ribosomal protein; rRNA-binding.
                            BY SIMILARITY.
FT
    INIT MET
                 0
                       0
    NON TER
                       8
FT
                8
    SEQUENCE
SQ
            8 AA; 850 MW; 63276DC768732417 CRC64;
 Query Match
                       81.0%; Score 17; DB 1; Length 8;
 Best Local Similarity 100.0%; Pred. No. 1.1e+05;
          3; Conservative 0; Mismatches 0; Indels
                                                          0; Gaps
                                                                      0;
       2 GPA 4
Qу
        111
       4 GPA 6
```

Search completed: March 18, 2003, 09:35:39

Job time : 12 secs

GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 18, 2003, 09:33:38; Search time 16 Seconds

(without alignments)

24.034 Million cell updates/sec

Title: US-09-520-856A-1

Perfect score: 21

Sequence: 1 LGPA 4

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 1100

Minimum DB seq length: 0
Maximum DB seq length: 10

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: PIR 73:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		용				
Result		Query				
No.	Score	Match	Length	DB	ID	Description
1	21	100.0	8	4	I54017	granulocyte-colony
2	19	90.5	10	2	B33710	ornithine decarbox
3	17	81.0	7	2	A33098	244K exoantigen -
4	17	81.0	9	2	S35538	ribosomal protein
5	17	81.0	9	2	A53797	3',5'-cyclic-GMP p
6	17	81.0	10	2	PH1345	Ig heavy chain DJ
7	15	71.4	9	4	I57650	hemoglobin alpha c
8	14	66.7	10	1	ECLQ1M	tachykinin I - mig
9	14	66.7	10	2	S70336	napin small chain
10	13	61.9	4	2	PT0675	T-cell receptor be
11	13	61.9	5	2	PT0267	Ig heavy chain CRD
12	13	61.9	5	2	JT0520	Ig kappa chain V-I
13	13	61.9	5	2	PT0669	T-cell receptor be

14	13	61.9	6	2	A61049	halo-toxin - Pseud
15	13	61.9	7	2	A44428	platelet aggregati
16	13	61.9	7	2	PT0515	T-cell receptor be
17	13	61.9	7	2	B48394	major fat-globule
18	13	61.9	8	2	E47393	neuropeptide calla
19	13	61.9	8	2	PT0368	Ig gamma chain C r
20	13	61.9	8	2	A28719	thymic humoral fac
21	13	61.9	8	2	PT0559	T-cell receptor be
22	13	61.9	9	2	S15850	vitamin D3 26-mono
23	13	61.9	9	2	s70332	endosperm protein,
24	13	61.9	9	2	G56978	collagen alpha 1(I
25	13	61.9	9	2	S26508	collagen alpha 2(V
26	13	61.9	10	1	XASNPC	angiotensin-conver
27	13	61.9	10	2	S65388	cytochrome-c oxida
28	13	61.9	10	2	A46491	C3 homolog HX - in
29	13	61.9	10	2	H28027	protein P11 - curl
30	13	61.9	10	2	s77990	cytochrome-c oxida
31	13	61.9	10	2	S68638	acetylcholinestera
32	13	61.9	10	2	S26506	collagen alpha 1(V
33	13	61.9	10	2	PH0927	T-cell receptor be
34	11	52.4	5	2	B60274	major protein anti
35	11	52.4	6	2	A43766	28K ubiquitin-immu
36	11	52.4	7	2	S71870	glutathione transf
37	11	52.4	7	2	PN0150	omega-gliadine 1'
38	11	52.4	7	2	PQ0727	H2 class I protein
39	11	52.4	7	2	I48086	DNA topoisomerase
40	11	52.4	7	4	A58725	virotoxin - destro
41	11	52.4	8	2	JS0317	leucokinin VII - M
42	11	52.4	8	2	I48935	apolipoprotein A-I
43	11	52.4	9	2	B45796	dihydrolipoamide S
44	11	52.4	9	2	S66607	quinoline 2-oxidor
45	11	52.4	9	2	C41170	photosystem II pro

```
RESULT 1
I54017
granulocyte-colony stimulating factor precursor - synthetic (fragment)
C; Species: synthetic
A; Note: human gene engineered and expressed in Echerichia coli
C;Date: 28-Jan-2000 #sequence revision 28-Jan-2000 #text change 28-Jan-2000
C; Accession: I54017
R; Devlin, P.E.; Drummond, R.J.; Toy, P.; Mark, D.F.; Watt, K.W.; Devlin, J.J.
Gene 65, 13-22, 1988
A; Title: Alteration of amino-terminal codons of human granulocyte-colony-
stimulating factor increases expression levels and allows efficient processing
by methionine aminopeptidase in Escherichia coli.
A; Reference number: I54017; MUID: 88284374; PMID: 2456256
A; Accession: I54017
A; Status: translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Residues: 1-8 <DEV>
A; Cross-references: GB:M20922; NID:g806638; PIDN:AAA66353.1; PID:g183043
```

100.0%; Score 21; DB 4; Length 8;

Query Match

Best Local Similarity 100.0%; Pred. No. 2.8e+05; Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 LGPA 4 Qу 1111 4 LGPA 7 Db

Search completed: March 18, 2003, 09:35:20 Job time: 18 secs

GenCore version 5.1.4 p5 4578 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

March 18, 2003, 09:35:24; Search time 12 Seconds Run on:

(without alignments)

15.364 Million cell updates/sec

US-09-520-856A-1 Title:

Perfect score: 21

Sequence: 1 LGPA 4

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

199416 seqs, 46092074 residues Searched:

Total number of hits satisfying chosen parameters: 27722

Minimum DB seq length: 0 Maximum DB seq length: 10

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Published Applications AA:* Database :

1: /cgn2 6/ptodata/2/pubpaa/US08 NEW PUB.pep:*

/cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*

/cgn2 6/ptodata/2/pubpaa/US06 NEW PUB.pep:*

/cgn2 6/ptodata/2/pubpaa/US06 PUBCOMB.pep:*

/cgn2 6/ptodata/2/pubpaa/US07 NEW PUB.pep:*

6: /cgn2 6/ptodata/2/pubpaa/US07 PUBCOMB.pep:*

7: /cgn2 6/ptodata/2/pubpaa/PCTUS PUBCOMB.pep:*

/cgn2 6/ptodata/2/pubpaa/US08 PUBCOMB.pep:* 8: 9:

/cgn2_6/ptodata/2/pubpaa/US09 NEW PUB.pep:*

10: /cgn2 6/ptodata/2/pubpaa/US09 PUBCOMB.pep:*

/cgn2 6/ptodata/2/pubpaa/US10 NEW PUB.pep:* 11:

12: /cgn2 6/ptodata/2/pubpaa/US10 PUBCOMB.pep:*

13: /cqn2 6/ptodata/2/pubpaa/US60 NEW PUB.pep:* 14: /cgn2 6/ptodata/2/pubpaa/US60 PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		용				
Result		Query				
No.	Score	Match	Length D	В	ID	Description
1	21	100.0	9	8	US-08-854-825-22	Sequence 22, Appl
2	21	100.0	9	9	US-10-101-487-111	Sequence 111, App
3	21	100.0	10	8	US-08-854-825-21	Sequence 21, Appl

4	21	100.0	10	10	US-09-911-838-196	Sequence 196, App
5	21	100.0	10	10	US-09-911-838-223	Sequence 223, App
6	19	90.5	7	9	US-09-818-991-35	Sequence 35, Appl
7	19	90.5	8	9	US-09-818-991-2	Sequence 2, Appli
8	19	90.5	8	10	US-09-822-250-2	Sequence 2, Appli
9	19	90.5	8	10	US-09-822-250-4	Sequence 4, Appli
10	19	90.5	8	10	US-09-987-456-141	Sequence 141, App
11	19	90.5	8	10	US-09-987-456-143	Sequence 143, App
12	19	90.5	10	10	US-09-767-460-42	Sequence 42, Appl
13	18	85.7	10	9	US-09-758-426-46	Sequence 46, Appl
14	18	85.7	10	9	US-09-758-198-46	Sequence 46, Appl
15	18	85.7	10	9	US-09-861-661-46	Sequence 46, Appl
16	18.	85.7	10	10	US-09-758-128-46	Sequence 46, Appl
17	17	81.0	5	9	US-10-113-085-3	Sequence 3, Appli
18	17	81.0	6	9	US-09-727-963A-35	Sequence 35, Appl
19	17	81.0	6	9	US-09-976-736-59	Sequence 59, Appl
20	17	81.0	6	9	US-09-976-736-67	Sequence 67, Appl
21	17	81.0	6	12	US-10-156-820-48	Sequence 48, Appl
22	17	81.0	8	9	US-09-848-967-29	Sequence 29, Appl
23	17	81.0	8	10	US-09-756-283A-48	Sequence 48, Appl
24	17	81.0	8	10	US-09-756-283A-50	Sequence 50, Appl
25	17	81.0	8	10	US-09-756-283A-52	Sequence 52, Appl
26	17	81.0	8 .	10	US-09-756-283A-53	Sequence 53, Appl
27	17	81.0	9	9	US-09-826-290-98	Sequence 98, Appl
28	17	81.0	9	9	US-09-826-290-342	Sequence 342, App
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; Sequence 22, Application US/08854825
; Patent No. US20020115061A1
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; APPLICANT: Chisari, Francis V.
; APPLICANT: Cerny, Andreas
; TITLE OF INVENTION: PEPTIDES FOR INDUCING CYTOTOXIC T
; TITLE OF INVENTION: LYMPHOCYTE RESPONSES TO HEPATITIS C VIRUS
; NUMBER OF SEQUENCES: 55
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CORRESPONDENCE ADDRESS:
;
      ADDRESSEE: Leydig, Voit & Mayer
      STREET: Two Prudential Plaza, Suite 4900
      CITY: Chicago
      STATE: IL
      COUNTRY: USA
      ZIP: 60601
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/854,825
      FILING DATE:
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
ï
      NAME: Silvert, Donald J.
      REGISTRATION NUMBER: 37552
      REFERENCE/DOCKET NUMBER: 61230
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 616-5600
      TELEFAX: (312) 616-5700
      TELEX: 25-3533
  INFORMATION FOR SEQ ID NO: 22:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 9 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
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US-08-854-825-22
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; Sequence 111, Application US/10101487
; Patent No. US20020169125A1
; GENERAL INFORMATION:
; APPLICANT: LEUNG, DAVID W.
 APPLICANT: BERGMAN, PHILIP A.
 APPLICANT: LOFQUIST, ALAN
 APPLICANT: PIETZ, GREGORY E.
 APPLICANT: TOMPKINS, CHRISTOPHER K.
  APPLICANT: WAGGONER JR., DAVID W.
  TITLE OF INVENTION: RECOMBINANT PRODUCTION OF POLYANIONIC POLYMERS AND USES
  TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 077319/0329
; CURRENT APPLICATION NUMBER: US/10/101,487
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CURRENT FILING DATE: 2002-03-20
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 PRIOR FILING DATE: 2001-03-21
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Search completed: March 18, 2003, 09:39:19

Job time : 13 secs

GenCore version $5.1.4_p5_4578$ Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 18, 2003, 09:33:41; Search time 14 Seconds

(without alignments)

8.407 Million cell updates/sec

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Listing first 45 summaries

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SUMMARIES

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      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
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    PRIOR APPLICATION DATA:
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      FILING DATE: 05-OCT-1990
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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(without alignments)

15.677 Million cell updates/sec

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3 21 100.0 6 13 AAR28737 Angiotensin I com 4 21 100.0 6 18 AAW42287 Biotinylated inter 5 21 100.0 6 18 AAW17696 Substrate #1 for m 6 21 100.0 6 23 AAM50401 Matrix metalloprof 7 21 100.0 7 9 AAP80963 N-terminal of hG-C 8 21 100.0 7 9 AAP82874 N-terminal of hG-C 9 21 100.0 7 9 AAP82875 N-terminal of hG-C 10 21 100.0 7 9 AAP82876 N-terminal of hG-C 11 21 100.0 7 9 AAP82876 N-terminal of hG-C 11 21 100.0 7 22 AAM43805 Hil binding site of 12 21 100.0 7 22 AAM43810 HIL binding site of 13 21 100.0 8 22 ABP12619 HIV AO2 super mot: 14 21 100.0 8 22 ABP12620 HIV AO2 super mot: 15 21 100.0 8 22 ABP12621 HIV AO2 super mot: 16 21 100.0 8 22 ABP15556 HIV AO2 super mot: 17 21 100.0 8 22 ABP15556 HIV AO2 super mot: 18 21 100.0 8 22 ABP12621 HIV AO3 motif gag 18 21 100.0 8 22 AAM22272 HIV peptide SEQ II 19 21 100.0 8 22 AAM22459 HIV peptide SEQ II 20 21 100.0 8 22 AAM22459 HUV peptide SEQ II 21 21 100.0 9 16 AAR84596 HCV-1 derived peptical SEQ II 22 21 100.0 9 22 ABP12742 HIV AO2 super mot: 24 21 100.0 9 22 ABP12742 HIV AO2 super mot: 24 21 100.0 9 22 ABP12742 HIV AO2 super mot: 25 21 100.0 9 22 ABP12740 HIV AO2 super mot: 26 21 100.0 9 22 ABP12740 HIV AO2 super mot: 27 21 100.0 9 22 ABP12740 HIV AO2 super mot: 28 21 100.0 9 22 ABP12740 HIV AO2 super mot: 29 21 100.0 9 22 ABP12740 HIV AO2 super mot: 29 21 100.0 9 22 ABP12740 HIV AO3 motif gag 28 21 100.0 9 22 ABP12740 HIV AO3 motif gag 28 21 100.0 9 22 ABP20553 HIV AO3 motif gag 28 21 100.0 9 22 ABP20554 HIV AO3 motif gag 29 21 100.0 9 22 AAM22490 HIV Peptide SEQ II 30 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM23317 HIV peptide SEQ II 31 21 100.0 9 22 AAM23317 HIV peptide SEQ II 31 21 100.0 9 22 AAM23317 HIV peptide SEQ II 32 21 100.0 9 22 AAM23317 HIV Peptide SEQ II 33 21 100.0 9 22 AAM23317 HIV Peptide SEQ II 34 21 100.0 9 22 AAM23317 HIV Peptide SEQ II	1	21	21 100.0	4	18	AAW17689	Substrate #1 for b
4 21 100.0 6 18 AAW42287 Biotinylated interest	2	21	21 100.0	4	22	AAG62643	Collagenase assay
5 21 100.0 6 18 AAW17696 Substrate #1 for reference	3	21	21 100.0	6	13	AAR28737	Angiotensin I conv
6 21 100.0 6 23 AAM50401 Matrix metalloprof 7 21 100.0 7 9 AAP80963 N-terminal of hG-C 8 21 100.0 7 9 AAP82874 N-terminal of hG-C 9 21 100.0 7 9 AAP82875 N-terminal of hG-C 10 21 100.0 7 9 AAP82875 N-terminal of hG-C 11 21 100.0 7 22 AAM43805 H11 binding site of hG-C 11 21 100.0 7 22 AAM43805 H11 binding site of hG-C 11 21 100.0 8 22 AAP12619 HIV A02 super motal 13 21 100.0 8 22 AAP12619 HIV A02 super motal 14 21 100.0 8 22 AAP12620 HIV A02 super motal 15 21 100.0 8 22 AAP12621 HIV A02 super motal 16 21 100.0 8 22 AAP12621 HIV A02 super motal 17 21 100.0 8 22 AAP20550 HIV A03 motif gag 18 21 100.0 8 22 AAM22459 HIV peptide SEQ I HIV A02 super motal 19 21 100.0 8 22 AAM22459 HIV peptide SEQ I HIV A02 super motal 20 21 100.0 9 22 AAR84596 HCV-1 derived peptide SEQ I HIV A02 super motal 21 100.0 9 22 AAP12739 HIV A02 super motal 22 21 100.0 9 22 AAP12739 HIV A02 super motal 23 21 100.0 9 22 AAP12742 HIV A02 super motal 24 21 100.0 9 22 AAP12740 HIV A02 super motal 25 21 100.0 9 22 ABP12740 HIV A02 super motal 26 21 100.0 9 22 ABP12740 HIV A02 super motal 27 21 100.0 9 22 ABP12740 HIV A02 super motal 28 21 100.0 9 22 ABP12740 HIV A03 motif gag 27 21 100.0 9 22 ABP12740 HIV A03 motif gag 27 21 100.0 9 22 ABP20553 HIV A03 motif gag 27 21 100.0 9 22 ABP20553 HIV A03 motif gag 28 21 100.0 9 22 AAM22490 HIV peptide SEQ II ADD 30 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM22491 HIV peptide SEQ II 32 21 100.0 9 22 AAM22491 HIV peptide SEQ II 32 21 100.0 9 22 AAM22491 HIV peptide SEQ II 32 21 100.0 9 22 AAM22491 HIV peptide SEQ II 32 21 100.0 9 22 AAM23317 HIV peptide SEQ II 33 21 100.0 9 22 AAM23491 HIV peptide SEQ II 33 21 100.0 9 22 AAM23491 HIV peptide SEQ II 33 21 100.0 9 22 AAM23491 HIV peptide SEQ II 34 21 100.0 9 22 AAM23491 HIV peptide SEQ II 34 21 100.0 9 22 AAM23491 HIV peptide SEQ II 34 21 100.0 9 22 AAM23491 HIV peptide SEQ II 34 21 100.0 9 22 AAM23491 HIV peptide SEQ II 34 21 100.0 9 22 AAM23491 HIV pe	4	21	21 100.0	6	18	AAW42287	Biotinylated inter
7 21 100.0 7 9 AAP80963 N-terminal of hG-C 8 21 100.0 7 9 AAP82874 N-terminal of hG-C 9 21 100.0 7 9 AAP82875 N-terminal of hG-C 10 21 100.0 7 9 AAP82876 N-terminal of hG-C 11 21 100.0 7 22 AAM43805 H11 binding site of hG-C 12 21 100.0 7 22 AAM43810 H11 binding site of hG-C 13 21 100.0 8 22 ABP12619 HIV A02 super mot. 14 21 100.0 8 22 ABP12620 HIV A02 super mot. 15 21 100.0 8 22 ABP12621 HIV A02 super mot. 16 21 100.0 8 22 ABP12621 HIV A03 super mot. 17 21 100.0 8 22 ABP12556 HIV A24 super mot. 18 21 100.0 8 22 ABP20550 HIV A03 motif gag 18 21 100.0 8 22 AAM22272 HIV peptide SEQ II 19 21 100.0 8 22 AAM22459 HIV peptide SEQ II 20 21 100.0 8 22 AAB61937 Human hG-CSF pept. 21 21 100.0 9 22 AAB61937 Human hG-CSF pept. 22 21 100.0 9 22 ABP12739 HIV A02 super mot. 23 21 100.0 9 22 ABP12740 HIV A02 super mot. 24 21 100.0 9 22 ABP12742 HIV A02 super mot. 25 21 100.0 9 22 ABP12742 HIV A02 super mot. 26 21 100.0 9 22 ABP12742 HIV A02 super mot. 27 21 100.0 9 22 ABP12742 HIV A03 motif gag 28 21 100.0 9 22 ABP20553 HIV A03 motif gag 29 21 100.0 9 22 ABP20554 HIV A03 motif gag 28 21 100.0 9 22 ABP20554 HIV A03 motif gag 29 21 100.0 9 22 AAM22490 HIV A03 motif gag 29 21 100.0 9 22 AAM22490 HIV peptide SEQ II 30 21 100.0 9 22 AAM22491 HIV peptide SEQ II 31 21 100.0 9 22 AAM22492 HIV peptide SEQ II 31 21 100.0 9 22 AAM22491 HIV peptide SEQ II 32 21 100.0 9 22 AAM22492 HIV peptide SEQ II 33 21 100.0 9 22 AAM33317 HIV peptide SEQ II 34 21 100.0 9 22 AAM33359 HER2/NEU DR super	5			6	18	AAW17696	Substrate #1 for m
8 21 100.0 7 9 AAP82874 N-terminal of hG-C 9 21 100.0 7 9 AAP82875 N-terminal of hG-C 10 21 100.0 7 9 AAP82876 N-terminal of hG-C 11 21 100.0 7 22 AAM43805 H11 binding site of the second site of the seco						AAM50401	Matrix metalloprot
9 21 100.0 7 9 AAP82875 N-terminal of hG-C 10 21 100.0 7 9 AAP82876 N-terminal of hG-C 11 21 100.0 7 22 AAM43805 H11 binding site of the s							
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							Human leukocyte an
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				9			Human leukocyte an
	43	21	21 100.0	10	10	AAP90874	Proposed T cell ep
44 21 100.0 10 12 AAR11569 Native HIV core p	44	21	21 100.0	10	12	AAR11569	Native HIV core pr
45 21 100.0 10 16 AAR84595 HCV-1 derived pept	45	21	21 100.0	10	16	AAR84595	HCV-1 derived pept

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AAW17689
ID
     AAW17689 standard; peptide; 4 AA.
XX
AC
     AAW17689;
XX
DT
     07-JUL-1997 (first entry)
XX
DΕ
     Substrate #1 for bacterial collagenase.
XX
KW
     Enzyme substrate; MMP-1; protease; tissue abnormality; mesoporphyrin IX;
KW
     malignancy; mammalian matrix metalloproteinase-1; bacterial collagenase;
KW
     human interstitial collagenase; cathespin D; plasmin; fungal infection;
     human collagenase Type IV; mammalian matrix proteinase-2; tissue injury;
KW
     72 kd gelatinase; MMP-2; intravascular clotting; bacterial infection;
KW
ΚW
     extravascular clotting abnormality; protozoal infection; therapy;
KW
     parasitic infection.
XX
OS
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XX
ΡN
     US5618790-A.
XX
PD
     08-APR-1997.
XX
PΕ
     05-OCT-1990;
                    90US-0593867.
XX
PR
     16-MAR-1994;
                    94US-0213897.
PR
     05-OCT-1990;
                    90US-0593867.
PR
     10-FEB-1992;
                    92US-0833183.
XX
PΑ
     (TOOH ) UNIV QUEENS KINGSTON.
XX
PΙ
     Kennedy JC, Pottier RH, Ringuet M;
XX
DR
     WPI; 1997-225448/20.
XX
PΤ
     Conjugate system for delivering therapeutic or diagnostic agent to
PT
     tissue abnormality site - useful to treat or detect abnormalities
PT
     caused by, e.g. malignancy or tissue injuries
XX
PS
     Claim 5; Column 18; 10pp; English.
XX
CC
     AAW17687-W17698 represent synthetic substrates for proteases known to be
СC
     active in and/or immediately adjacent to certain specified cell or
CC
     tissue abnormalities. This sequence is a substrate for C. histolyticum
CC
     bacterial collagenase. These sequences can be used in the conjugate
CC
     system of the invention. The conjugate system is for delivering a
CC
     therapeutic or diagnostic agent to a tissue abnormality site (TAS) in a
CC
     patient. The system comprises a lipophilic or amphiphilic agent,
CC
     covalently linked to a protease sensitive polypeptide (such as this
CC
     sequence) having an amino acid sequence readily cleavable by a protease
CC
     active at the TAS, but not at a normal tissue site, and a solubility
CC
     modifier conjugated to the protease sensitive polypeptide. Peptides
CC
     sensitive to cleavage by bacterial collagenase, cathespin D, plasmin,
CC
     human collagenase Type IV (also known as 72 kd gelatinase, mammalian
CC
     matrix proteinase-2, or MMP-2), or mesoporphyrin IX, can also be used in
CC
     the system. The system can be used to treat or detect tissue
CC
     abnormalities caused by malignancy, tissue injuries, intravascular or
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extravascular clotting abnormalities or bacterial, fungal, protozoal or
CC
CC
     parasitic infections.
XX
SO
     Sequence
                4 AA;
  Query Match
                          100.0%; Score 21; DB 18; Length 4;
                          100.0%; Pred. No. 7.8e+05;
  Best Local Similarity
             4; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
        1 LGPA 4
Qу
          1111
Db
        1 LGPA 4
RESULT 2
AAG62643
ΙD
     AAG62643 standard; peptide; 4 AA.
XX
AC
     AAG62643;
XX
DT
     11-SEP-2001 (first entry)
XX
DE
     Collagenase assay related furanacryloyl peptide.
XX
KW
     Antibacterial; antibiotic; peptide deformylase; PDF; drug discovery.
XX
OS
     Unidentified.
XX
FΗ
                     Location/Qualifiers
     Key
FT
     Modified-site
FT
                     /label= OTHER
FT
                     /note= "modified by FA"
XX
ΡN
     WO200138561-A1.
XX
PD
     31-MAY-2001.
XX
PF
     27-NOV-2000; 2000WO-US32346.
XX
PR
     29-NOV-1999;
                    99US-0449419.
XX
     (QUES-) QUESTCOR PHARM INC.
PA
XX
PΙ
     Frechette R, Davis S, Jaeger C, Chong L, Knap A, Witherell G;
PΙ
     Moehle C, Gluchowski C;
XX
     WPI; 2001-457200/49.
DR
XX
PT
     Use of peptide deformylase inhibitors to treat bacterial infections
XX
PS
     Disclosure; Page 15; 77pp; English.
XX
CC
     The present invention describes a method of screening for test compounds
CC
     which selectively inhibit peptide deformylase (PDF) containing the native
     iron catalytic metal centre, involving measuring the level of deformylase
CC
CC
     activity following incubation of the test compound in an assay. This can
CC
     be used in the discovery of novel antibacterial compounds, which are
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particularly useful against antibiotic-resistant organisms. The present
CC
     sequence is a furanacryloyl peptide used in a collagenase assay in the
CC
     exemplification of the invention.
CC
XX
SQ
     Sequence
                4 AA;
  Query Match 100.0%; Score 21; DB 22; Length 4; Best Local Similarity 100.0%; Pred. No. 7.8e+05;
  Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                                 0;
        1 LGPA 4
Qу
          +111
        1 LGPA 4
Db
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Search completed: March 18, 2003, 09:34:18
Job time: 34 secs